

THE NATIONAL PROVISIONER

PUBLISHED EVERY SATURDAY

(Copyright, 1904, by the Food Trade Publishing Co.)

ENTERED AT NEW YORK AT SECOND-CLASS RATES.

Vol. XXX.

New York and Chicago, March 26, 1904.

No. 13.

MORE COTTON OIL MILLS.

The Beaumont Cotton Oil & Export Company of Beaumont, Tex., a new company, capitalized at \$200,000, is said to contemplate the erection of cotton oil mills at Beaumont and at Huntsville, Ala. There are already two mills at Huntsville, but there is said to be room for a third.

NO FREE HIDES THIS YEAR.

Hides will not go on the free list this year. On Wednesday the House Committee on Ways and Means, by a strict party vote, defeated a motion by Representative Williams of Mississippi to place hides on the free list. This settles the hide question for this session of Congress. At the same time motions to put salt, coal, wood pulp, agricultural implements and other articles on the free list were also voted down.

A BOOM AT NASHVILLE.

The signing of an agreement by President Milton Smith of the Louisville and Nashville Roadroad making the old union stock yards at Nashville the only official yards for the delivery of stock, has revived the packing industry in that city, and there is talk of reopening the packinghouse located at the yards, which has been closed for several years. The Cudahy interests figure chiefly in the company which now controls the yards.

BONUS SEEKERS AT EL PASO.

El Paso, Tex., is the latest point attacked by the independent packing plant microbe. Bonus grafters have reached that far southwestern city and stirred the business men with dreams of millions to be made in the establishment of immense packing establishments. The bonus seekers are using local cattlemen for cats-paws, but have not thus far succeeded in arranging to pull any chestnuts out of the fire.

MOVED TO NEW ORLEANS.

The Southern Grease Company has been granted a permit for the erection of a factory in New Orleans for the refining of oils and fats and the manufacture of soaps and by-products. It was stated that the promoters had been driven out of Chicago by the agitation in that city against rendering plants and like concerns, and had decided to establish themselves in the Southern city. A site has been leased from the Crescent Slaughterhouse Company, and work will commence at once on the buildings.

BAD BUTTER IN DISGUISE

State pure food officials who take infinite pains to make trouble for dealers in the healthful and honest oleomargarine product are stricken with sudden blindness when it comes to violations of laws of the State and of health by butter peddlers. It became necessary for United States internal revenue officers to get after people who have been selling renovated

butter up in New York State as a choice creamery product. At Cortland some very "loud" samples of this product were kept in cold storage and offered for sale with the government labels removed and the sign "Choice creamery butter" put on instead. It is said a quantity of the renovated article was disposed of at high prices by this trick.

OLEO DEALERS WILL FIGHT

Dealers in oleomargarine in Pennsylvania are tired of the campaign of persecution which has been waged against them by Pure Food Commissioner Warren, of that State, and they intend to put a stop to it if they can. They have organized to fight the Commissioner clear through the courts, and test appeals have already been taken.

M. V. Mellet, a dealer at Pottsville, Pa.,

was convicted and was about to be fined in the Superior Court there. His offence was the sale of oleomargarine colored yellow, as the best product is colored. It was labelled oleomargarine, and no attempt at deception was made. The dealers contend that the Commissioner had no right to interfere with such traffic, and they have taken an appeal, causing sentence to be suspended in this case.

POISON IN GERMAN SAUSAGES

One of the experts of the Bureau of Chemistry, United States Department of Agriculture, announces that he has found aluminum acetate in samples of every variety of sausage imported from Germany into this country which he has examined. This discovery was made in the course of tests now in progress by the government experts of imported food products. It is declared that the basic aluminum acetate is evidently injected into the sausage after it is put into the case on very much the same plan as ordinary embalming is done. Aluminum acetate is indigestible, and is harmful even in this small quantity to the human stomach.

This announcement was made by E. M. Chace, one of the chief experts of the Bureau of Chemistry, in an address before the Cosmos Club in Washington last week on "The Use of Basic Aluminum Acetate as a Preservative in Sausage." Mr. Chace said that "every can of imported sausage contained a certain amount of this preservative, which is evidently injected into the meat before it is tied up in skin by the manufacturers. The average amount is about 135 milligrams to the can. Investigation has proven that aluminum salt is not digestible, and consequently this preservative in the meat is harmful to the stomach."

At the same time Mr. Chace declared that he had made tests of American sausages, but that he had not found any trace of aluminum acetate or any other harmful preservative in any of them.

The following official confirmation of the

investigations of the department has been received from Chief Wiley, of the Bureau of Chemistry:

UNITED STATES DEPARTMENT OF AGRICULTURE,

Bureau of Chemistry.

Washington, D. C., March 24, 1904.

Editor National Provisioner:—The investigations which we make of imported food products are confidential in regard to the names of the firms and particulars of analyses. It is, however, no violation of this confidence to say that the particular ingredient of certain imported sausages to which we object is acetate of alumina. This material is described in a medical work as a disinfectant and as having all the properties of sulphate of alumina. Sulphate of alumina is a styptic and poisonous substance when used in considerable quantities. By reason of this medical statement we have, I think, rightfully objected to the introduction of such a substance into a food product.

We are making further investigations of the matter in order to secure still more evidence and scientific opinions.

Respectfully,

H. W. WILEY, Chief.

This news will prove of interest to exporters of American provisions, who have established the highest standards of purity and healthfulness in the manufacture of their pork products, and who have had to combat German prejudice and unjust customs barriers.

FLEXIBLE NORTHERN DRIVE

Let us tell you about it, how its flexibility aids new and old industries alike by its ready, economical, convenient adaption and operation
NORTHERN ELECTRICAL MFG. CO., MADISON, WIS., U. S. A.

This is a matter potent for good,
for profit.
Let us tell you how Northern Drive
will help your business.



Write for Motor Bulletin No. 2229,
and tell us about the arrangement
of your plant and the various
machines you are operating.

81

A CONFERENCE OF CATTLEMEN

It has been decided to call a conference of all the cattle interests west of the Mississippi River at Denver on May 3, to discuss measures for the relief of stockgrowing interests from transportation abuses and what is termed unwise congressional legislation. The formal initiative has been taken by President Turney, of the Texas Cattle Raisers' Association, as a result of resolutions adopted at the recent session of that body at Fort Worth. The Colorado association, which met at Denver last week, took similar action, and the other associations will fall in line.

There was a rumor that this conference would result in the formation of a cattle-growers' national association to take the place of the National Livestock Association, the reason given being that cattlemen were dissatisfied with the preponderance of sheep and other interests in the latter body. This rumor

is strenuously denied by Secretary Martin, of the National Livestock Association, and does not receive open support in other quarters.

The conference is primarily to discuss measures to force the railroads to give meat producers better rates and more satisfactory facilities in moving stock to market. Grievances against the railroads overshadow all other topics. The promoters of the independent packing house scheme, headed by Secretary Martin, will be on hand to boom that plan and to try to sell some of the stock of the concern to the conference delegates. But the cattle-growers are beginning to see through the rainbow brilliance of the independent scheme and to perceive the shadow of financial failure that lurks behind. The Texans are particularly keen-sighted, and the stock peddlers will get small encouragement in that quarter.

BAD BUTTER MESS IN OHIO.

The Hucksters' Association of Ohio has engaged attorneys to fight the Dunlap bill, now before the Legislature of that State, which compels dealers to indicate to their customers what butter they have worked over since receiving it from farmers. They claim that the article as it comes from the farmers is unrepresentable, and to show that it has been made marketable would cause customers to think it had been reduced in purity. Nothing is said in this connection about the Ohio oleomargarine product, made and sold under the most perfect sanitary conditions, which does not need working over in order to be made fit to offer for sale, but which is nevertheless discriminated against by an unjust State food law.

TO RESTORE RETURN PASSES.

Iowa stockmen are jubilating over their success last week in securing the passage in the Iowa house of representatives of a bill requiring the railroads in the state to provide stock raisers with return passes when shipping stock. This is a substitute for the Delano bill, introduced at the instance of the Corn Belt Meat Producers' association, which was defeated because it was too radical. The stockmen are now hoping to secure the adoption of the new bill by the senate and its enactment into law. It will be stubbornly fought by the railroads.

REPORTS OF LAND PURCHASES

Rumors of big purchases of Southern lands by prominent packers interested in cattle raising are again current. The visit of Mr. E. C. Swift, of Swift & Company, to Southern cities last week, en route to Cuba on a recreation trip, revived the stories. It was telegraphed from Mobile that Mr. Swift and others had bought 150,000 acres of land in the east end

of Baldwin county, Florida, to be used as a stock ranch, and the purchase price was said to be in the neighborhood of \$50 an acre. The last time the story went the rounds it had a combination of packers buying up millions of acres of Southern swamp lands, for the feeding and fattening of cattle on the casava plant.

RUSSIA CONTINUES EXPORTS.

The Russian government is taking special pains to deny the reports spread abroad since the beginning of the war that exports of provisions and foodstuffs from her territory would be prohibited during the period of hostilities. It was declared that all her products would be needed for home and army consumption, and that the bars would be put up. Instructions have been given to all Russian officials abroad to deny this report, and to declare that Russia's export trade will continue as before.

ICE PLANT AT PANAMA.

United States Consul General Gudger at Panama City, Panama, has sent a report to the Department of Commerce and Labor upon the proposed public works at Panama. Mr. Gudger says that as the present contract for a monopoly on ice expires in a few weeks and the government seems determined not to renew it, but has decided to build an ice plant. Ice has been very high—at times 5 cents, and never less than 2 cents, a pound.

MORE POWER FOR ARMOUR PLANT.

The new Armour plant at Sioux City, Ia., is to have a big addition to its power facilities. William Cunningham, superintendent of construction in charge of the building of the plant, has received instructions to add a 50-foot section to the power house as provided for by the present plans. The additional section will make the building 110 feet east and west and 160 feet north and south. These dimensions will give a power house much the largest in Sioux City. The expectation is to have at least 2,000 men working in the new plant by next November.

ASBESTOS IN SIBERIA.

A Moscow firm has been granted permission to work asbestos mines not far from the Kutai, an affluent of the Angara in Siberia. The asbestos layers are found 7 feet from the surface. There are some asbestos mines in the Urals, in European Russia, but the larger part of the asbestos used for insulators in Russia is imported.

CANADA TO MAKE BETTER BEEF.

The livestock men of Canada are endeavoring to improve their beef breeds. They have encouragement from the transportation companies to do so on account of the export live and dead meat trade. The interior packing-houses have found some difficulty in marketing the product of the live stock which has been brought into the pens for slaughter purposes during the last year. This fact and the foreign demand for good "store" cattle have spurred the Canadian feeders to pay more attention to the building of beef for the trade.

BILL DID NOT PASS.

The attempt to get a bill through the Kentucky legislature regulating charges to be made at stockyards was a failure. The bill introduced by Representative Thompson was one of those which failed of passage at the session just concluded.

HIGHER CATTLE AND LOWER BEEF

The promoters of the Independent Packing Company have set up a false standard in their effort to interest the stockmen of the country in their project. The standard is: higher prices for cattle and lower prices for meats. The two things are impossible. Any practical beef man knows that. Secretary Martin is an honest and a conscientious man, but he is misinformed when he says that live beef is lower and meat higher than in 1902.

Live stock is not bringing nearly as much money now as then—and there are excellent commercial reasons for that fact. The beeves sent to market during 1903 were generally of an under grade kind and real prime native steers were hard to get. They are scarce now. The reason was that feeders who bought on the high market of 1902 fattened at the high prices offered during that year and sold on the falling market, which struck bottom last year. These finishers kept out of the market in 1903 and the run of cattle which came was of that grade which usually dominates a grasser season. They were not worth more than they brought. Many commercial conditions made 1902 an unusually high live-stock and beef year. It is not necessary to recount these, for they did not exist during 1903. It is not a fact, however, that cattle are lower and beef higher than two years ago.

Beef kept going down all through 1903. It followed cattle down the scale. The result was that carcass beef sold at 7½c. to 8½c. per lb. all through the year. It is now 7c. to 7½c. per lb. in the carcass. During 1902 carcass beef averaged nearly 10c. per lb. during the year. Any butcher knows that and any cattle-man who has taken the pains to look the matter up knows it as well. So it weakens the Independent's position among intelligent stockmen to say that cattle average 30 per cent lower and beef 30 per cent higher than during 1902.

The prices which retail butchers charge in any given place is another matter. But no butcher in any accessible part of the country sells his meat as high as he did in 1902, and he has not done so last year nor this. Much less has any one sold meat 30 per cent higher.

Easy to Get at Facts.

Any one can easily post himself on meat prices. All he has to do is to walk into a refrigerator where the butchers buy their shop supplies and price beef. If he is not yet satisfied he can stand around and hear the butcher and the box manager dicker. At any rate, the selling price will not amaze the visitor, unless by its lowness. New York City is a city where the best commercial price is paid for the best beef available. At no time this year could packers get 8½c. per lb. in the carcass. At most times the best carcass beef went at about 7½c. and the average price has been under 7c. per lb. In 1902 the livestock men received more than that for their live stock in the pens. They received over 9c. on the hoof and good beeves averaged around 8c. live weight.

If the visitor to the cooler cannot feel convinced by what he has heard, he may proceed to verify it by going to various other coolers and by comparing his figures as the stuff is sold to the butchers. Then, if he pleases, he may step into the live stock pens at the stockyards and hear the bidding upon the beeves which are sold there. If he knows anything about figuring the live and dead cost he may

sit down and find out just what problem the packer has to face. He will figure out a loss. He may then decide not to become a packer, and he may make up his mind to stop being a "kicker."

Some Live Stock Figures.

The livestock dailies are not "packers' organs." They are distinctly the reverse. The Chicago Daily Drovers' Journal gives the following as the average prices paid for each of the four general grades of beef animals for the years 1899 to 1903, inclusive:

	Straight Texas steers.	Texas cows and heifers.	Native corn-fed steers.	Native corn-fed Western beeves.
1899.....	\$4.86	\$3.25	\$4.90	\$5.35
1900.....	4.20	3.38	4.75	5.30
1901.....	4.20	3.10	5.05	5.55
1902.....	4.80	3.35	6.20	6.00
1903.....	3.95	2.95	4.70	4.95

Fancy cattle sold higher in each year. The average price of stock at the respective stockyards on the same standard of measuring values is the best guide to the sales. It obtains the average price by running the total price through the total number of pounds of each class of stock sold. It thus seems that the average price of straight Texas steers in 1903 was only 85c. per 100 lbs. lower than in the high year of 1902, and an average of about 27c. per 100 lbs. lower than in any of the preceding years cited. Texas bulls, cows and heifers averaged 40c. per 100 lbs. lower last year than the year before; native corn-fed Texas is \$1.50 per 100 lbs. lower than in 1902, but about the same average as during 1899 and 1900. Native Westerns averaged \$1.05 per 100 lbs. lower during 1903 than in 1902, and about 49c. per 100 lbs. lower than during 1899, 1900 and 1901. This, too, in the face of the fact that the beeves of 1903 were of a uniformly poorer grade than those of the preceding year.

The prices of live stock at the stockyards has not dropped \$3.00 per 100 lbs., or 3c. per lb. on the average, as the complaining stockmen say. But carcass meats have declined on an average of more than \$4.00 per 100 lbs., more than 4c. per lb.

Prices for Range Cattle.

The claim is constantly made that while feeders are getting a fair price for their finished beeves, under all of the circumstances, range stockmen have not been so fortunate. This is a hard class of cattle to grade in the market. The official stockyards sales, based upon figuring favorable to live stock, show that range cattle have sold with the market and fared as well as the other stock which passed under the hammer there. The prices were:

	Steers.	Cows and heifers.	Stockers and feeders.
1899...	\$3.75@5.70	\$2.75@4.85	\$3.65@5.00
1900...	3.00@5.35	2.50@5.00	3.35@4.75
1901...	3.00@5.75	1.50@4.60	2.60@4.55
1902...	3.20@7.40	2.00@5.75	3.10@5.40
1903...	2.60@5.05	1.75@4.50	2.35@4.38

The above are Chicago stockyards prices for the years named.

The absence of feeders from the market caused a slump in the price of steers last year. The official figures showing the prices at which cattle actually sold discloses no alarming shrinkage in live stock values, and but slight variation in the averages for the five years noted; 1902 was a year of unusual conditions.

Such conditions cannot be expected every year to boost or to sustain prices of stock.

Another test of values is the average top price for Western range cattle at Chicago for the years, as follows:

	Top Prices.	Average Prices of all sorts.
1899.....	\$5.70	\$4.60
1900.....	5.35	4.35
1901.....	5.75	4.55
1902.....	7.40	4.95
1903.....	5.05	3.65
add		
1897.....	4.90	...
1898.....	5.00	...

Cattle were lower both in 1897 and 1898 than they were last year.

The sales speak for themselves. They do not show what stockmen allege. They show what stockmen received for the millions of cattle which were sold at the livestock centers, and there is but a transportation tariff difference between the prices at any of the packinghouse marts.

Now institute a comparison with dead beef. The best carcass beef in 1902 sold for 12c. per lb. by the carcass. The best last fall brought 8½c., and it only brings 7½c. to 7¾c. now at wholesale. In spite of this fact Secretary Martin of the National Livestock Association and of the Independent Packing Company, as well as other conscientious gentlemen, make the serious statement that cattle are 30 per cent lower and beef 30 per cent higher than in 1902. The press has reflected this same false report.

The best carcass beef should always be 4½c. per lb. higher than the price of the live steer producing it to give the slaughterer a margin of profit. That is, if a steer sells for \$4.50 per 100 lbs. on the hoof, his meat should fetch \$9 per 100 lbs. on the hook. Just now, however, such beef only brings 7¾c. in the carcass, and the unfortunate abattoir man has to look to the by-products and their market to recoup his losses on the carcass.

Rests on an Unsound Basis.

The professed scheme of the Independent Packing Company is twofold: to give more for cattle and to sell meat cheaper. The effort will be futile, as it rests upon a fallacious basis. No packer can cut his way out at present cattle prices. Just how the new concern can increase expenses at the buying end and shave off its margin at the selling end and still make money is a hidden mystery.

Bluntly, it cannot be done. Such an undertaking will be a disastrous wild-goose chase. Mr. Martin's error is the fatal assumption that cattle are 3c. per lb. cheaper and meat 3c. per lb. dearer than in 1902. Neither is true. On the contrary, meat is 4½c. per lb. cheaper at wholesale than in 1902, or 7½c. per lb. at variance with the stockmen's assumption. They are beginning to see it of late. The Texas Cattlemen's Association, for one, is awakening to the truth.

This one thing is true. The Independents or the Stockmen can make as much money as the packers do when they are as well equipped as the latter, and have all the facilities of distribution in the consumptive market which the packers have. The new people, when they get that far, will learn that they cannot raise the prices of stock without also raising the prices of meats. When they find that the consuming public will decline to accept the rise in meats, what are they going to do with their stored stuff and their elevated livestock values? Then,

when they fail to get meat prices down below present figures, while at the same time shoving up livestock values, what will the livestock men and the expectant public say?

There is room enough for the Independent Packing Company in the field, because the existing concerns are constantly enlarging to meet the requirements of the trade. The National Provisioner does not wish to see such excellent people as the stockmen and those forming the new company fly in and fall out because their base is illogical.

Has any stockholder in the company ever seriously figured out what a steer is actually worth in the by-product and meat market? At 6c. per lb. alive a 1,200-lb. steer is worth \$72. Dead, his carcass (696 lbs. at 8½c.) is worth \$60.90, hide \$6, raw fat, offal, etc., \$8; total, \$74.90. But it cost \$13.92 to kill, refrigerate, transport to market and sell him. Just think it over when talking about higher cattle and cheaper meats. It is an impossibility except at the price of insolvency.

NINE-YEAR SUIT ENDED.

The Supreme Court, of Kansas, in a decision handed down at Topeka last week sustained the verdict of the Wyandotte county district court in the case of S. K. Howe against the Armour Packing Company, the result of which places Howe in possession of a valuable tract of land from which he was ejected in 1895. The property includes about seventeen acres, located near the Armour plant, and is valued at about \$100,000. The suit, which has been in the courts for nine years, involves one of the numerous contests over disputed accretions along the shore of the Missouri River.

The principal question at issue in this case seemed to be whether the property is an accretion to the main land or to an island on the Missouri side of the state line owned and formerly occupied by Howe. This island extended just to the state line, and in the course of years that part of the channel west of it became filled up. Howe took possession, and in 1895 Armour's ejected him, claiming that the new land was an accretion to the company's property.

But the Supreme Court's decision does not stop the litigation. In fact, it just brings the matter around to the point where the proper method of litigation will begin. It is true that Howe is given possession of the land, but the packing company can institute a suit for ejectment against him and it is likely that, unless a compromise is effected, the property will be in dispute another long term of years. Should such a suit be begun it will devolve upon Armour's to show that the accretion was formed to the main land and not to Howe's island. The second suit, however, will not be instituted in the name of the Armour Packing Company, but by H. M. Meriwether, to whom as trustee, Armour's have transferred their claims. This transfer was the result of the fact that Howe sued the packing company for rent and received \$1,000 as a compromise. Since the controversy over the accretion neither he nor the packing company has placed any improvements on the tract.

WANTED AND FOR SALE.

Reference to page 48 may discover something of interest to you, whether you are employer or employe. Look it up.

RANGE AND SOUTHERN CATTLE MEN WIN

There is to be a show of car lot range cattle and of Southern stock at the St. Louis World's Fair after all. The Westerners and Southerners made a strong and persistent fight for representation, and finally beat down the opposition of Chief Coburn of the live stock department of the fair, and the blooded stock breeders and Eastern stockraisers who did not care to have the rangers and quarantine cattle "butt in." Everything was harmonized, however, a resolution "jolly" Chief Coburn was passed, and all is now harmonious, with all classes of stockraisers entitled to a showing.

The Exposition management, in compliance with the requirement of the recent act of Congress in connection with the World's Fair loan, has set aside \$19,000 for a show of breeding cattle from below the quarantine line and a car-lots cattle show, following the regular series of Exposition live stock shows at St. Louis this fall. This was approved at a conference with representatives of the southern breeders and range cattle interests by President Francis, Director Skiff and Chief Coburn at St. Louis, last week. The conference decided on a show for exhibits of pure-bred breeding cattle from south of the quarantine line about November 15 or earlier, simultaneously with a car-load lots exhibit, either steers or heifers, or both, from all sections, with \$19,000 to be offered as prizes. This amount will be divided equally between the car-load lots cattle show and a show of pure-bred cattle from be-

low the quarantine line. The Short-horn, Hereford, Aberdeen-Angus and Galloway breeds will be equally recognized in the exhibit of breeding cattle.

For the car-lots show a continental division giving five districts is made. The Eastern district includes the States of Minnesota, Iowa and Missouri, all States east of these and north of the quarantine line, and the Canadian provinces of Ontario and Quebec. The northwestern district includes all of Canada except Ontario and Quebec, and the States of Washington, Oregon, Idaho, North Dakota, South Dakota, Montana and Wyoming. The central district is made up of the States of Kansas, Nebraska, Colorado, Utah, Nevada and the portion of California north of the quarantine line. The southwestern district comprises Arizona, New Mexico, and the portions of Texas and Oklahoma north of the quarantine line. All territory south of the quarantine line, including Mexico, makes up the southern district.

The following resolution was unanimously adopted: "Resolved, That the management of the affairs of the live stock department of the Universal Exposition by Hon. F. D. Coburn, the Chief of the Department, has been consistent, courageous, safe and wise, and that he be and is hereby requested to arrange the classification and prize-list for the exhibits of southern breeding cattle and the show of car-load cattle, and to have entire charge of their management."

RAILROAD ENTERPRISE PROFITABLE

At least one of the Western stock-carrying roads has taken up the matter of improved facilities for moving stock to markets with results highly agreeable to the cattlemen and profitable to the road. The Burlington route has instituted a system of fast stock trains covering the Nebraska territory contiguous to the Kansas City market, by which it gets shipments into the Kansas City yards promptly and in the best condition for early and profitable marketing. This service has become so popular that special trains have been added to the regular fast service, and all are

crowded to capacity. It is said one result is the taking of business away from St. Joseph, which went to that market under ordinary transportation conditions.

The loosening of the car stringency in the East has helped all the roads, and better service is reported on all the lines. Stock cars, refrigerator cars and general freight rolling stock which has been tied up in Eastern blocks is being released, and the western packers and stock raisers are finding the carrying capacity of the roads somewhere near their demands.

PUTS OLEO DEALER UNDER BAN.

The Pennsylvania Supreme Court has sustained the decision of a judge who backed up Pure Food Commissioner Warren of Pennsylvania in his crusade against oleomargarine, by deciding that persons indicted for selling oleo without a license may be restrained from dealing in the product until their cases have been tried.

W. N. Andrews was indicted in Philadelphia under the act of 1901 for selling without a license. Before his trial an agent of the Dairy and Food Commission filed a petition in the Quarter Sessions, alleging that Andrews had, after the beginning of the prosecution, again violated the act and prayed the court to issue an order restraining him from further violation of the statute. Under the ninth section of the act the court granted a rule upon Andrews to show cause why such an order should not be granted, and after hearing, granted the order. In sustaining this action, Judge Henderson says it is not an

equity proceeding, but one authorized under the exercise of the police power of the Commonwealth for the preservation of the public health and the prevention of fraud upon the public, and this remedy is in consonance with the principle of preventive justice.

WRECKED A NEW PLANT.

An example of the vandalism that accompanies labor strikes occurred at Kansas City last Friday night, when sixteen masked men, heavily armed, overpowered the watchman at the plant of the Proctor & Gamble Soap Company, in course of construction in West Armourdale, and wrecked the steel framework in the first story of the oil refinery building. The loss to the steel construction company doing the work is \$5,000. It is supposed that the damage was done by structural ironworkers who have declared a strike against the contracting company. Work on the plant will be delayed two months as a result of the vandalism.

THE HOG INDUSTRY

Condensed from Bulletin No. 47, Bureau of Animal Industry, U. S. Dept. of Agriculture,
By George M. Rommel, B.S.A., Expert in Animal Husbandry.

(Continued from last week.)

The importance of the male in the herd should not be asserted at the expense of the females, yet the importance of a male of marked excellence must not be minimized. The boar represents 50 per cent of the reproductive power concentrated in one animal; the sows represent an equal amount of reproductive force, divided up among ten or twenty or fifty individuals. If, then, these females do not, in their conformation and fecundity, conform strictly to the same type, they are merely convenient machines for the birth and rearing of young—not what they might be, an influential force in furthering the plans of the breeder and raising the standard of the herd. One thing must not be forgotten, and it indicates the chief difference between the influence of the two sexes in the herd. A superior boar may be used on a herd of inferior sows with good results, but the use of an inferior boar on sows of high quality will have a disastrous outcome. The one method raises the standard of the herd; the other inevitably lowers it.

Feed and Management.

The details of selection, feed, and management of live stock are intricately interwoven and interdependent. A man may be an excellent judge of stock, able to select those animals for his herd whose use will give the best results in breeding; but if his system of feeding and management is not such that the animals will thrive and yield a good increase, good selecting is rendered ineffective. On the other hand, the herd may be carefully fed and skillfully managed, the feed may be the best and properly combined, the shelter warm and dry, and the water supply pure, but if the herd is poorly selected the owner is practically throwing away the feed he gives them.

Hogs require attention, regardless of condition, age, or sex, but the management of the brood sows is the surest test of the breeder's skill. If sows are carelessly fed during pregnancy, trouble of some kind is sure to ensue at farrowing; if overfed after farrowing, losses may occur among the pigs from scours and thumps. At no time is the development of the pigs so easily influenced as while they are dependent on the sow's milk—the first month of life. Excepting the ravages of epidemics, perhaps the greatest death losses in the herd occur during this time, including farrowing. The accidents during farrowing, an attack of scours due to the milk of the dam, or a chill while following the sow in pasture on a wet day, may stop growth temporarily, leaving a permanently stunted pig, or may result fatally. On the other hand, the results of good management during pregnancy are as marked as the unfortunate consequences of careless methods.

During pregnancy two facts must be borne in mind. The first is that the sow is doing double duty. Not only is she keeping up her own bodily functions, but the development of the fetal litter is a constantly increasing drain on her system. It must be remembered, in the second place, that the main demands upon the sow are those for the building of new tissue. Hence the kind of feed is important.

What are known as the nitrogenous, or protein-bearing, feeds are needed at this time. These are bran, oil meal, pease, beans, oats, and barley, and, to a moderate extent, wheat. The forage plants that are especially suitable to pregnant brood sows are the clovers and their relatives—alfalfa, peas, beans, vetches, etc. The ordinary pasture grasses are also of much value. Feed should be given in such form that the system of the sow will be at its best. Corn should not be fed in large amounts to breeding stock. If possible, it should not be fed at all to any but fattening animals. During the winter more care will be needed to keep the sow in good health on account of the absence of pasture.

All the brood sows may run together up to within two weeks of farrowing time; then it is well to separate them, placing each sow by herself in a yard with a small house, such as has been described, which should be dry, airy, and clean. A great deal of exercise will not now be necessary. The farrowing pen should be provided with fenders around at least three sides about six or eight inches from the floor and six or eight inches from the wall. These should be strong enough to support the weight of the sow should she lie on them. They will, in a large measure, protect the pigs from being lain upon during the first few days of their lives. This will go far to prevent a very fruitful cause of loss among young pigs. The little fellows will soon learn to creep under these fenders when the sow lies down. Many breeders now use a specially arranged farrowing pen for sows, the object being to allow the sow room enough to farrow with reasonable comfort, but not enough to turn around.

The management of sows during farrowing will depend largely on the animal and on the weather conditions. Assistance should be at hand if needed, but the sow should not be helped if she is getting along nicely alone. Many pigs are lost annually by lack of attention during farrowing; but, on the other hand, there is no doubt that in many cases overanxiety and too much attention may do more harm than good and often results seriously. The assistance that is imperative at this time is to help in cases of difficult labor and to protect pigs from chilling in cold weather. When farrowing occurs during warm weather, a minimum amount of attention will be needed. For the first twenty-four hours the sow should, as a rule, have no food, and will need none. If, however, she shows signs of hunger, a thin slop of bran and shorts or a thin oatmeal gruel may be given. Tepid water should be given to drink as the sow wants it. Never give cold water. The feeding for the first three or four days should be light and carefully given, and the time consumed in getting the sow on full feed should be from a week to ten days, depending on the size and thrift of the litter. The first feed should be very light, and in the form of a thin, warm slop, such as is mentioned in the preceding paragraph, working gradually to full feed. The pen should be cleaned daily if the sow is confined to it.

No time should be lost after farrowing in getting the sow into the open air. Of course, if the pigs were farrowed during the winter months care will be needed, and it may be necessary to let the pigs reach the age of two weeks before turning them out. The appetite for something besides the dam's milk may begin to assert itself by the time the pigs reach three weeks of age. As the pigs learn to eat, feed may be increased. Skim milk should be used liberally, using rather large quantities at first, from 6 to 12 pounds of milk to each pound of grain. During this period comparatively little corn should be fed, as a rule. Scours and thumps often cause very serious losses among young pigs. The former is caused usually by overfeeding, by feeding badly spoiled feed, in the feed of the dam that affects her milk, by an abrupt change of feed, or by a change. Thumps is generally caused by overfeeding and lack of exercise.

If the pigs have been properly managed for the month after they first begin to eat, and are taking feed in amounts sufficient to make them more or less independent of the sow's milk, weaning will not be a difficult process and will be brought about so that it will be scarcely perceptible, so far as the effects on the pigs are concerned. The time to wean will depend on the way the pigs are eating and the convenience of the breeder. Breeders differ widely as to the age of weaning. The majority wean at six to ten weeks, with a considerable number at twelve weeks; some older than twelve weeks, and a few younger than six weeks. The method of weaning will depend somewhat on circumstances. If the pigs are so little dependent on the sow's milk that she is gaining rapidly in flesh and lessening in milk flow, the weaning may be abrupt, the sow being taken away out of hearing. If she is still milking considerably she may be returned to the pigs once a day for two or three days, or the pigs may be taken away in detachments, beginning with two or three of the largest and strongest, then the next strongest, leaving the weakest ones of the litter to complete the drying off. Whether the weaning is brought about directly or gradually, it should in all cases be complete and decisive. The pigs should be placed apart from the sows in quarters secure enough to prevent communication. By no means should pigs be allowed to follow a sow until she is almost worn out. The pigs are no better and the sow infinitely worse than if weaning had been brought about properly.

Feeding the Pigs.

Attention will now be given to the pigs that have been weaned. Up to this time all are on the same feed and under the same management. From now on, however, those that are to be retained as breeding animals should be continued on a growing ration—that is, one which is somewhat narrow and will develop bone and muscle to the largest extent; those that are to be fattened for market should be fed more liberally and their feed made more carbonaceous.

The foundation on which to build up a successful breeding animal is ample range, affording an abundance of exercise, and a rather narrow ration. Growth should be continuous and feed plentiful. The pigs should not be given range so large and so little feed that they will develop nothing but bone;

neither should they have so much to eat that they will become indolent and refuse to take the exercise required to develop necessary bone and muscle. Exercise will strengthen the sinews and develop strong muscles, as well as firm joints and strong legs, while a well-filled stomach will nourish these; and from this management we may expect a sow that will be strong, thrifty, and a good breeder, and a boar that will do good work in the herd without breaking down in any respect before he should. Gilts should not be served before the age of eight months, bringing the first litter at twelve months. This gives sufficient time for the development of the reproductive organs.

Fattening Young Animals.

As soon as it is determined what pigs are to be fed for market their fattening should be started without delay. Experiments have repeatedly proved that young animals always fatten more economically than old ones, and therefore any delay in finishing is accompanied with a loss. Corn will now come into the ration, and should be supplemented by all the variety of feed at the feeder's command, to keep the appetite keen and the digestive system in the best condition. This variety should consist of mill feeds, dairy by-products, and succulent feeds, and, according to some authorities, pasture. If skim milk, whey and buttermilk are at command they can be combined to very good advantage with the ration, commencing with a proportion of about 2 pounds of milk to 1 of grain at weaning time, and reducing the quantity of milk until the pigs are finished on grain alone. A pig gives best returns from dairy by-products while young. The fattening pigs should gain from 1 pound to 1½ pounds daily, and should weigh between 250 and 300 pounds at 9 or 10 months of age. Gains made after this weight are nearly twice as expensive as those made when weighing from 50 to 100 pounds, and a well-bred pig finished at a weight of about 250 pounds will very nearly fill the market requirements and bring a satisfactory price.

The pigs which are to be used for breeding purposes should be selected during the time when the pigs are with the sow. If he is raising hogs for market a breeder will select only sows, castrating all boars. The selections should be made as early as possible, depending on the skill of the breeder. A selection for a breeding animal should not be made unless there are good and sufficient reasons for it, and unless the breeder is quite sure he is right in making the selection. The sows selected should be from large litters and from dams that are good milkers, and of quiet, motherly dispositions.

The boar pigs should be castrated during cool weather, as soon as the testicles descend into the scrotum. An early date is always preferable to a late one; for the development of sex characteristics is of no value to an animal that is intended for meat. The practice of spaying sows is not very general. It is much more difficult than castration. After pigs are weaned the dry sows should be placed in a pasture by themselves and given very little grain. Those that show themselves to be prolific and good mothers should be retained as breeders; those having a deficient breeding record or being unsatisfactory in any way should be fattened and sold as soon as possible. If a second litter

is wanted during a year the sows should be put to the boar during the first heat after weaning.

Management of the Boar.

When the boar arrives at the farm he should be dipped, as a matter of ordinary precaution, against the introduction of vermin. As an additional precaution, a quarantine pen should be ready for him, especially if epidemics are prevalent. In short, he should be treated in much the same manner as has been prescribed for the sows. His feed before change of owners should be known, and either adhered to or changed gradually to suit the new conditions. If he has come a long journey it will be well to feed lightly until he is well acclimated.

His permanent quarters should be a clean, dry, warm, well-lighted and well-ventilated pen, 10 or 12 feet square, with a yard adjoining where sows may be brought for service. This yard should be large enough to give him some exercise during the breeding season, when it may be inconvenient to allow him the run of a pasture. Adjoining the yard should be the boar's pasture, from one-half acre to an acre in extent, consisting of clover, alfalfa, or good pasture grasses that thrive in the locality. Breeders generally advocate the practice of keeping a boar to himself during the entire year—out of sight and hearing of the sows. However, a boar is often allowed to run with the sows after they are safe in pig; but during the breeding season it is by far the best policy to keep him by himself, admitting a sow to his yard for mating, and allowing but one service.

The feed of the boar when not in service may be of a succulent nature—mainly pasture and cut green forage during the summer months and roots in winter. A boar can hardly be sustained on this alone, and some grain should be allowed to keep him in condition. This should be nitrogenous in character, consisting of mill feeds—such as shorts, middlings, and bran—some oil meal, and the leguminous grains, with a little corn. As the breeding season approaches, the feed should be increased, so that the boar will be in good condition. While not in service, ample exercise should always be insisted upon, even if it must be urged by the whip.

Sanitation in the Hog Lot.

The greatest drawback to the hog industry which breeders in this country have to contend against is the presence of highly contagious diseases known as hog cholera and swine plague, or, popularly, as "cholera," and were it not for the fecundity of these animals their profitable production would be out of the question. There are a few fundamental facts which he must remember if he is to avoid losses by reason of the presence of hog cholera or swine plague in the herd. The first is that they are specific germ diseases, disseminated by bacteria, and the contagion can not spread from one animal to another or from one herd to another except by these minute organisms. They may be carried in a multitude of ways—by the hogs themselves, on the clothing of persons, on vehicles, in feed, by dogs, birds, and other animals, or by streams. The breeding or feed of a hog can not cause either disease, although bad methods may so weaken constitution and vitality that the animal becomes more sus-

ceptible than would otherwise be the case; second, diseases caused by bacteria may be prevented in large part by thorough disinfection; third, bacteria are generally preserved in filth, and, therefore, scrupulous cleanliness will go far toward preventing outbreaks of disease in herds of hogs.

Preventive measures must be most relied upon. Hogs must be given dry and well-ventilated quarters, which must be kept clean. Contrary to common belief, hogs have some habits which raise them above other domestic animals from the standpoint of cleanliness. For example, unless compelled to do so, a hog will not sleep in its own filth. While breeding is the surest and quickest means to fix type, the system weakens vitality unless very carefully followed. For this reason closely inbred hogs are more susceptible to cholera than those whose constitutions have not been impaired by the system. The advantage of a number of small, portable houses, each accommodating a few hogs, rather than one large piggery for the entire herd, has been referred to in the foregoing pages. In districts where cholera is prevalent these are undoubtedly the best shelters. Whenever new animals are brought to the farm, or when animals are brought home from shows or from neighboring herds, they should be kept apart from the rest of the herd for at least three weeks. If they have been exposed, the disease will manifest itself within this time, and the sick animals can be treated or killed and disposed of at once.

Treatment of Disease.

As soon as sickness appears in the herd the unaffected hogs should be at once removed to clean, disinfected quarters, preferably without much range; for by running over pastures they may come in contact with contagion. Their feed should be carefully regulated and, if they have previously been on pasture, should include some green feed, roots, or an abundance of skim milk. The quarters in which the sickness first appeared should be thoroughly cleansed, all bedding and rubbish burned, and loose boards and old partitions torn out and burned. If the pen is old, knock it to pieces and burn it. Disinfest pens and sleeping places, using air-slaked lime on the floors and the carbolic acid solution on the walls and ceilings. White-wash everything. If a hog dies burn the carcass or bury it deeply out of the reach of the crows, buzzards, or dogs.

Treatment of hogs suffering from cholera or swine plague is not always satisfactory. The disease runs its course so rapidly that curative measures are more or less ineffectual, and prevention of an outbreak should be relied upon rather than the cure of sick animals. Hogs often suffer very much from vermin. Lice are introduced from neighboring herds, and the losses in feeding are often severe, especially among young pigs, when death is sometimes a secondary if not an immediate result. In light and isolated cases they may be destroyed by washing the hogs. In severe cases, however, especially where the whole herd is affected, thorough spraying or dipping should be resorted to. In this case a dipping tank will be a great convenience. In these remarks on sanitation no attempt has been made to go into the details of the disease affecting hogs or

their treatment. They are simply intended to call attention to the simple measures which may be used by any farmer to avoid, to a large extent, the decimation of his herd by epidemics. Cleanliness and rational methods of management are relied upon by thousands of farmers to keep their herds in health and vigor. They are the marks of the good farmer and successful hog breeder.

(Continued next week.)

ST. JOSEPH'S FAIR EXHIBIT.

Plans have been completed for the miniature reproduction of the St. Joseph stockyards and packinghouse district in an exhibit at the St. Louis World's Fair. The model is a very faithful reproduction of the entire livestock interests of South St. Joseph—the various buildings, sheds and inclosures, the railroads, switchyards and all other properties used in the handling of stock being displayed to the best advantage. It is designed to fill a space thirty feet long by nineteen feet eight and a half inches deep.

On the extreme left of the exhibit the spectator will lean upon a brass railing and through the glass windows of an idealized packinghouse will study the workings of the various departments. The cattle and hog-killing rooms, the engine and boiler rooms, the interiors of the chicken house, oil house and bonehouse will all be visible from this point, and the more or less elaborate processes in each will be reproduced by the action of clockwork upon tiny figures of men and beasts.

This will be the only portion of the exhibit in which there will be moving parts. The remainder will be devoted to a miniature stockyards with cattle, hogs and sheep standing about in the pens, to the packinghouses and railroads. From left to right the Hammond, Nelson Morris, Swift and Company, Viles & Robbins and St. Joseph Packing and Transportation plants will be shown in the order named. In the foreground will be the livestock exchange building, while all about them will be the maze of railway trackage, with miniature locomotives and cars at intervals.

HENS ARE NOT ANIMALS.

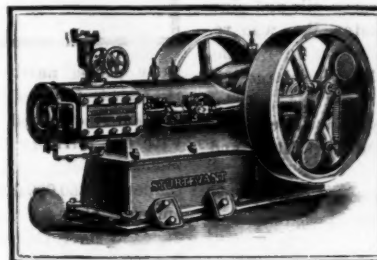
Having rendered its profound judgment that frogs' legs are poultry products, the Board of Appraisers of the United States Customs Department has added another to its tariff definitions of fish, flesh and fowl. Judge Byron S. Waite of the board of United States general appraisers handed down a decision to the effect that hens are not animals in the meaning of the tariff law. In it he overruled a protest by R. E. Clowner of Boston against the assessment of 3 cents a pound as poultry on twenty-three boxes of live barred Plymouth rock hens, which the importer declared were birds of long pedigree and imported for breeding purposes. He claimed free entry for them under the clause providing for animals for breeding purposes. Judge Waite, in his decision, says that the word "animals" in the law must be construed to include only quadrupeds.

AMERICAN CATTLE IN SOUTH AFRICA.

American cattle are being shipped to South Africa in increasing numbers to restock the farms there. The greater portion were shipped from Texas, the breeds being Shorthorn, Hereford, Jersey, Holstein and Devon.

Ten Thousand Sturtevant Engines

Are in Use Throughout the World



SIZES RANGING FROM 2 to 400 HP.

Over thirty years of the most exacting experience is compressed into their design and workmanship

B. F. STURTEVANT CO.

Boston, Massachusetts

New York

Philadelphia

Chicago

London

353

PROVISIONS BEAR \$400 PER TON FREIGHT.

The people of Alaska are making an effort to have the transportation facilities to Alaska improved. At times, especially in the winter, it is very hard to get any meat to eat in parts of the territory, except by the slaughter of wild animals. Coldfoot is one of these isolated places. In midwinter provisions rise out of reason in price. This is not marveled at when it is known that it costs about \$400 per ton freight to get provisions over the almost impassable trails to that section. President Roosevelt's attention is being called to these facts by a petition from the residents.

Mr. McKenzie, the Commissioner, has carefully looked over the situation and is convinced that better transportation facilities should in some way be provided to Alaska. It is thought that the opening of a road from the Yukon to the Coldfoot region would give much and needed relief to that section and to the points along the route. The matter is now engaging the attention of the authorities at Washington. This road may open up the country and start northward a larger meat and provision trade from the United States.

HEREFORD BREEDERS REORGANIZE.

The American Hereford Breeders' Association has completed its reorganization and authorized the removal of its headquarters from Chicago to Kansas City. At a recent meeting held in the latter city an appropriation of \$25,000 was made for prizes for the forthcoming exhibitions at St. Louis, Chicago, Kansas City and elsewhere. Of this amount, \$4,000 will be devoted to the American Royal, \$4,000 to the International show at Chicago, \$5,000 to the St. Louis Exposition—exhibit, \$2,000 to the show to be held in Hamline, Minn., and the balance to various smaller shows to be held in different parts of the West during the year.

A new set of by-laws was adopted and officers re-elected. Dr. James E. Logan, of Kansas City, will continue to act as president

during the ensuing year; William George, of Aurora, Ill., as vice-president; C. R. Thomas, of Kansas City, as secretary, and W. B. Waddell, of Lexington, Mo., as treasurer. The new executive committee consists of C. A. Stannard, C. H. Comstock and R. C. Rhome.

FROZEN CLAMS IN OREGON.

The Coos Bay Cold Storage Co., Marshfield, Ore., is working up an extensive trade in frozen clams. These clams are little larger than an egg, very fat, and more tender than the ordinary clam. They are frozen in cans about the size and shape of oyster cans and shipped under refrigeration to California, Arizona and other points south and east and also to the Hawaiian Islands.

**SEE PAGE 48 FOR
Wanted and For Sale Advertisements**

TRADE GLEANINGS

Buffalo Fertilizer Company, Columbus, O.; capital \$200,000. R. M. Rowand, Z. L. White, Foster Copeland, and others, incorporators.

The plant of the cottonseed oil company, New Decatur, Ala., was partially destroyed by fire on March 12. Loss, \$5,000.

Standard Manufacturing Company, Hoboken, N. J.; capital \$100,000. Louis B. Dailey, H. O. Coughlan and others, incorporators. Manufacture fertilizers, greases, oils and glue.

Charles F. Miller, Lancaster, Pa., who recently purchased the soap works in Buffalo, N. Y., owned by R. W. Bell, will enlarge and improve plant.

Everdell Pork Company, Far Rockaway, N. Y.; capital \$8,000. Frederick Fitter and others incorporators.

United Oil & Soap Company, Chicago, Ill.; capital \$10,000. R. L. Foote, L. E. Cary and others, incorporators.

Mackelgough Company, Jersey City, N. J.; capital \$50,000. Chas. H. McWilliams and others, incorporators. To deal in food products.

Gadsden cottonseed oil mills, Gadsden, Ala., have been bought by the Boaz Cotton Oil Mill Company.

Excelsior Meat & Produce Company, New York; capital \$10,000. Morris Metzger, Leopold Rosenthal and others, incorporators.

C. J. Allen Company, Springfield, Mass.; capital \$5,000. Edward O. Brooks, president; Charles J. Allen, treasurer. Deal in produce.

Adolph Printz will establish a pork packing plant in Pottstown, Pa.

Newton Oil & Manufacturing Company will build a cottonseed oil mill and fertilizer factory.

Armour & Co. lost a large warehouse in San Angelo, Texas, by a fire which destroyed business property worth \$200,000 in that city on March 17.

EXPORTS TO OUR "COLONIES."

Commerce of the United States with its non-contiguous territory now averages about \$8,000,000 per month, and it is apparent that for the full fiscal year it will aggregate a round \$100,000,000. In the term "non-contiguous territory" are included Alaska, the Hawaiian Islands, the Philippine Islands, Guam, Tutuila, and Porto Rico. Records of their shipments to the ports of the United States and of shipments from the various ports to them are now regularly presented by the Department of Commerce and Labor through its Bureau of Statistics.

These records show that the shipments from the United States to Alaska, Hawaii, Porto Rico, the Philippines, Guam, and Tutuila aggregated in the seven months ending with January, 1904, nearly \$21,000,000, and the merchandise received from them in the

same period nearly \$31,000,000. If to this is added the gold bullion received from Alaska, the grand total of our commerce with the territory in question for the seven months ending with January would amount to nearly \$60,000,000, which makes it quite apparent that for the fiscal year ending with June 30 next the total will be fully \$100,000,000.

The shipments from the United States to the territories in question included all classes of manufactures and food stuffs. Provisions figure largely in the Alaskan and Porto Rican shipments, though not so prominently in the others. The export of provisions to these territories was as follows: Alaska, \$564,646; Hawaii, \$338,563; Porto Rico, \$731,681; Philippines, \$242,986.

BRITISH LIVE STOCK CENSUS.

The British live stock census figures for 1903 show that the favorable conditions of last season resulted in an increase in the numbers of stock of all classes except sheep. Coming after three years of drought, which cut down cattle, sheep, hogs and horses alike, this increase was grateful to stock-raising interests. The reports on farm live stock in Great Britain show the following:

	1903.	1902.
Cows and heifers.....	2,588,205	2,556,126
Hogs	2,686,539	2,290,567
Sheep	25,639,797	25,765,706
All cattle.....	6,704,610	6,555,976
Horses	1,537,154	1,504,789

*As given in the official reports.

CINCINNATI STOCK YARDS OFFICERS.

The Cincinnati Union Stock Yards Company has elected the following officers for the ensuing year: President, N. H. Biggs; vice-president, W. J. Lippincott; secretary and treasurer, B. F. Davis; directors, H. L. Breneman, N. H. Biggs; C. D. Kinney, B. F. Davis, Abe Furst, A. J. Mullane, W. H. Doane, C. L. Werk, W. J. Lippincott.

WM. GRAVER TANK WORKS

Manufacturers and Builders of

Steel Storage and Car Tanks

Main Office 505-506 Plymouth Bldg., CHICAGO

'PHONE, HARRISON 681

PROPOSALS

PROPOSALS FOR FRESH VEGETABLES.

—Office of Chief Commissary, Manila, P. I., Jan. 15, 1904.—Sealed proposals, in triplicate, will be received here until 11 A. M., May 10, 1904, and then publicly opened for furnishing and delivery of fresh vegetables to Subsistence Department at Manila, P. I., during year ending June 30, 1905. About 680,000 pounds potatoes and 140,000 pounds onions per month will be required. Accepted vegetables will be admitted free of customs duties. United States reserves right to decrease amount called for in contract by not to exceed 40 per cent. upon reasonable notice to contractor, or to increase amount called for, with consent of contractor. Each proposal must be accompanied by Bidder's Guaranty in amount of \$20,000 or by certified check for that amount on bank of approved standing in Manila. Bidder to whom contract is awarded will be required to give bond, penalty of which will be fixed by Chief Commissary. Information furnished on application. Envelopes containing proposals should be marked: "Proposals for fresh vegetables for F. Y. 1905, to be opened May 10, 1904," and addressed to HENRY G. SHARPE, Colonel, U. S. Army, Chief Commissary.

MUST IMPROVE CANADIAN BUTTER.

The Canadian government dairy service has been suggesting improvements to Canadian butter makers which, if followed, will help Canadian butter greatly. The chief complaint is that of irregularity of quality, and the cause of this defect is held to be due to the fact that the butter is not kept cold enough at the creameries, is exposed to heat unnecessarily in transit to Montreal, and is not frozen properly at that point before being placed in the cold storage chambers of the steamers. The remedy is to be found in better supervision of the creameries, on the railway and at the port of shipment.

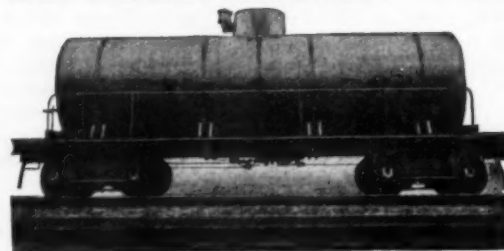
VARIETY MANUFACTURING CO.

Manufacturers of

Gross Counter-Balance Elevator,
Doors, Gross Horizontal Folding
Doors, Fire Doors of all descrip-
tions, Blackman Exhaust Fans.

77-83 W. Lake Street, CHICAGO, ILL.

Oil Tanks on Steel or Wooden Cars



Strictly According to Penna. R. R.
Requirements.

ANY CAPACITY

ANY PURPOSE

Write Us

Warren City Tank &
Boiler Works,

WARREN, O.

Semi-Annual BOOK SALE

Standard Works at
REDUCED PRICES

FOR THIS SALE ONLY

*To those who would know all about their
trade these books are invaluable.*

"Manufacture of Sausages," \$2.00,
Now, \$1.50.

"Pork Packers' Handbook and Direc-
tory," \$10.00,
Now, \$4.00.

"Manufacture of Glue and Gelatine,"
\$10.00,
Now, \$5.00.

"Manufacture of Varnish and Linseed
Oil," \$5.00,
Now, \$1.50.

"Manufacture of Cotton Seed Oil," \$3.00,
Now, \$1.75.

"Scientific Encyclopedia," \$5.00,
Now, \$4.00.

"Secrets of Canning," \$5.00,
Now, \$3.00.

"Douglas's Encyclopedia." Data and
recipes for packers, sausage makers,
glue makers, etc.
\$2.50

THE NATIONAL PROVISIONER

Floor A, Produce Exchange

New York City

EXPORTS SHOWN BY STEAMERS.

Following were the exports of commodities from New York to Europe the week ending March 19, 1904, as shown by Lunham & Moore's statement:

Steamers.	Oil				—Beef—		—Lard—	
	Cake.	Cheese.	Bacon.	Butter.	Tcs. Bbls.	Pork.	Tcs. Pkgs.	
Lucania, Liverpool	1880	431	1386	200	....	....	745	1400
Aurania, Liverpool	361	158	501	....	....	....	173	500
Celtic, Liverpool	2921	1783	549	35	....	56	200	3982
Bowie, Liverpool .....	....	1060	....	135	....	....	200	1857
New York, Southampton .....	....	1631	2646	25	....	....	25	400
Menominee, London .....	....	147	250	....	....	120	359	3195
Toronto, Hull .....	....	902	....	....	....	100	1835	4691
Titian, Manchester .....	....	117	....	....	....	....	650	6400
Ethiopia, Glasgow	695	867	1033	642	103	....	141	222
Pretoria, Hamburg .....	....	110	171	26	413	100	2217	3075
Vaderland, Antwerp	13165	....	665	....	....	255	95	3818
British Empire, Antwerp	9750	....	182	....	....	15	25	100
Bremen, Bremen .....	....	....	50	100	....	600	....	....
Kaiser Wil. der II., Bremen .....	....	....	....	275	....	....	....	....
Le Bretagne, Havre .....	....	....	....	....	....	....	....	50
Micmac, Havre	3343	....	....	....	....	....	170	....
Hekla, Baltic .....	....	100	408	45	184	53	725	2500
Hellig Celav., Baltic	750	....	....	25	244	73	335	250
Lombardia, Mediterranean .....	....	....	....	....	....	....	85	320
Koenigin Luise, Mediterranean .....	....	768	....	100	55	....	60	250
York Castle, South Africa .....	....	....	....	....	....	....	....	268
Total	27703	6029	9137	6928	694	1511	923	7996
Last week	37324	7014	6987	8529	907	995	809	3205
Same time in 1903	32366	4262	7706	5225	728	2259	391	6522

AMERICAN PORK IN THE EAST.

American pork products are at last coming to be sought after in foreign markets under their own name, rather than in disguise as the product of some other country. This is due largely to the breaking down of prejudice and the disproving of false reports, spread by jealous rivals, ends accomplished through the consistent merit of American packing house goods under modern methods.

"American pork products, imported directly from the United States and divested of all foreign pretensions, are beginning to show up in this market," says United States Consul Ravndal in a report from Beirut, Syria. "On April 20, 1881, the Sublime Porte issued a decree prohibiting, 'in consequence of the existence of trichina in the salt pork imported from America,' importation of this meat into the empire. A year later this measure of interdiction was extended to ham and lard of the same source. Minister Wallace observed in those days that, in spite of the decree, nearly nine-tenths of the salted meats consumed in Turkey would continue to be American under some foreign brand. While this prediction has proved correct to some extent, it is interesting to learn that the Turkish government, in reply to representations made in April, 1900, by Mr. Griscom, chargé d'affaires, and in March, 1901, by Minister Leishman, has removed the prohibition against the importation of American pork products.

"Importations of this character must be accompanied by certificates from the sanitary authorities at the point of departure, authenticated by the Turkish consul, showing that the article has been microscopically examined and found clean. On arrival in a Turkish port the shipment will be examined again and admitted if found perfectly sound; otherwise it will be returned. In my report on this subject to the department of state under date of February 2, 1900, I stated that grocers here wanted American hams for this market. I would now recommend that exporters at home take advantage of the opening afforded. Correspondence should be addressed to Fadoul Ribels, George Komnos, or Najib Letayf, of Beirut; American Exchange Company, Haifa; Meshaka & Nachman, Damascus; and John Hakim, Tripoli."

EXPORTS OF PROVISIONS

Exports of hog products from Atlantic ports for week ending March 19, with comparative tables:

PORK, BARRELS.	Week		Nov. 1, 1903, to Mar. 19, 1904.
	Mar. 19, 1904.	Mar. 21, 1903.	
United Kingdom	669	509	19,858
Continent	308	446	8,007
So. and Cent. Am.	812	173	9,340
West Indies	1,417	640	23,723
Br. No. Am. Col.	742	271	4,895
Other countries	18	17	1,452
Totals	3,966	2,056	62,275

BACON AND HAMS, POUNDS.	Week		Nov. 1, 1903, to Mar. 19, 1904.
	Mar. 19, 1904.	Mar. 21, 1903.	
United Kingdom	9,181,337	7,745,330	206,532,944
Continent	858,000	1,098,388	32,807,693
So. and Cent. Am.	94,075	69,725	2,845,695
West Indies	192,700	203,000	5,237,100
Br. No. Am. Col.	5,800	....	25,825
Other countries	8,650	344,000	846,550
Totals	10,340,362	9,461,043	248,295,807

LARD, POUNDS.	Week		Nov. 1, 1903, to Mar. 19, 1904.
	Mar. 19, 1904.	Mar. 21, 1903.	
United Kingdom	2,228,057	5,361,461	106,354,701
Continent	5,626,105	4,987,470	132,115,295
So. and Cent. Am.	115,740	299,260	7,823,475
West Indies	705,130	528,445	13,594,980
Br. No. Am. Col.	40,570	....	169,770
Other countries	190,790	81,800	1,558,065
Totals	8,906,302	11,258,436	261,613,276

RECAPITULATION OF WEEK'S EXPORTS.

Pork.	Bacon and Hams.		Lard.
	bbls.	lbs.	lbs.
New York	3,387	4,170,275	4,112,680
Boston	382	2,661,500	602,470
Portland, Me. ....	....	1,966,075	263,200
Philadelphia .....	....	1,047,287	123,960
Baltimore	150	278,925	3,365,410
New Orleans	47	30,900	234,950
St. John, N. B. ....	....	155,400	....
Galveston .....	....	....	113,713
Totals	3,966	10,340,362	8,906,302

COMPARATIVE SUMMARY.

	Nov. 1, 1903, to Mar. 19, 1904.		Increase.
	1904.	1903.	
Pork, lbs.	13,855,000	12,222,800	1,632,200
Bacon & hams, lbs.	248,295,807	249,178,135	....
Lard, lbs.	261,613,276	256,871,908	4,741,368

OCEAN FREIGHT.

	Liverpool.		Glasgow.		Hamburg.	
	Per Ton.	Per 100.	Per Ton.	Per 100.	Per Ton.	Per 100.
Canned meats	7/6	12/6	12/6	16c	12/6	16c
Oil cake	5/3	5/	5/	13c	5/	13c
Bacon	7/6	12/6	12/6	16c	12/6	16c
Lard, tierces	7/6	12/6	12/6	16c	12/6	16c
Cheese	25/	25/	25/	2 M	25/	2 M
Butter	25/	30/	30/	2 M	30/	2 M
Tallow	7/6	15/	15/	16c	15/	16c
Beef, per tierce	1/6	2/6	2/6	16c	2/6	16c
Pork, per bbl	1/3	2/0	2/0	16c	2/0	16c

The National Provisioner

NEW YORK and
CHICAGO

Published by

THE FOOD TRADE PUBLISHING CO.

(Incorporated Under the Laws of the State of New York.)

DR. J. H. SENNER..... President

GENERAL OFFICES

Floor A, Produce Exchange, New York, N. Y.
Cable Address: "Sampan, New York."
TELEPHONE NO. 5200 BROAD.

WESTERN OFFICE

Chicago, Ill.; 447 Rialto Building.
Telephone, Harrison 4455.

Representative for Europe, HENDRICK HARTOG, Hamburg, Germany. Dovenfleet 51 (Brauerhof).

Terms of Subscription Invariably in Advance, Postage Prepaid:

United States and Canada, excepting New Foundland \$3.00
All Foreign Countries in the Postal Union, per year (21s.) (21m.) (26fr.) 5.00
Single or Extra Copies, each10

In requesting your address changed, give OLD as well as NEW address

Subscribers should notify us before their subscriptions expire as to whether they wish to continue for another year, as all subscriptions are entered by us for that period. Notice to discontinue should be given before the expiration of the present subscription, as otherwise we must continue the paper for another year. THE NATIONAL PROVISIONER is never discontinued when the subscription expires. Failure to notify us of the subscribers' intentions is equivalent to their ordering the paper continued for another year. The majority of our subscribers would rather not have their subscriptions interrupted and their files broken in case they fail to remit before expiration. We, therefore, take it for granted, unless notified at the end of the year to discontinue, and the amount of back subscription is paid to date, that the subscriber wishes to receive the paper without interruption for another year.

We do not consider that papers returned to our office is notice to discontinue.

No Contract made by any Representative of this Paper is Binding until it is accepted by the Publishers

Valuable Advance Information Exclusively to Advertisers.

Advertising Rates on Application.

Correspondence on all subjects of practical interest to our readers is cordially invited, and the co-operation of all packers, mill owners and superintendents, managers, employees and other thinkers is earnestly desired. Clear, concise articles are especially welcome. News items, local newspaper clippings or any information likely to interest the trade will be thankfully received.

Money due THE NATIONAL PROVISIONER should be paid direct to the General Office, or to any agent bearing the written authorization of THE NATIONAL PROVISIONER to collect. No other payments can be recognized. Make checks, drafts, postoffice orders, etc., payable to the order of THE NATIONAL PROVISIONER, Floor A, Produce Exchange, New York.

The NATIONAL PROVISIONER NEW YORK AND CHICAGO

HOGS LOOK HIGHER

Those who predicted 4-cent hogs have about given up the hope for such an event. Hogs are now selling freely around 5½ cents. It is true that they brought over 7 cents a year ago and over 6 cents two years ago. Three years ago they fell to 4½ cents and reached 4 4-5 cents the year before that. The winter pack at leading centers closed with nearly 800,000 hogs to the good, compared with the same season of last year. The summer packing season finds a liberal supply of hogs coming and the stocks of provisions seem to be piling up a bit in the warehouses, which had become comparatively empty during the last six months.

The exports of provisions have not been relatively as large during the latter part of February as they were in January, when our exports of hams, bacon and pickled pork increased sensibly. For the seven months ending with January, 1904, we exported 148,000,000 lbs. of bacon, 121,000,000 lbs. of hams and 81,000,000 lbs. of other pork products, as compared with 136,000,000 lbs. of bacon, 131,000,000 lbs. of hams and 67,000,000 lbs. of other pork products for the same period of 1903. Our lard exports increased from 297,000,000 lbs. for the same seven months of 1903 to 337,000,000 lbs. in 1904. The falling off in the relative increase of provision exports after February 15 is due, it is believed, to the lighter buying by Russia and Japan and the inability to get stuff to the front. Orders are held here. This also has something to do with the apparent stocking up which is now taking place in the warehouses. In the meantime hogs will look higher and come steady and good.

FARM CURED MEATS

The farm curing of hams and bacon meets an emergency, but the farm-cured product is not the best keeping nor the most wholesome eating substance of its kind. In the first place, it is difficult to extract the animal heat properly from about the bone. If the weather is too cold the meat freezes and damage is done. If too warm, the meat soon spoils. Under any circumstances the product is overdosed with salt, having it first rubbed in and then being packed in salt. The result is that the farm-cured stuff has enough saline matter in it to unpleasantly affect the stomach, and farmers are noted for spring and summer digestive disorders. Much of the meat becomes tainted before it is consumed. When most products are smoked the fuel used is pine needles or tops, and thereby the meat becomes creosote cooked. The bone centers yield to taint

because the animal heat has not been thoroughly extracted by the make-shift process of the farm curers.

There is another circumstance which often makes farm-cured pork unwholesome. It is the fact that the swine are not inspected. If the hogs are sick no one knows it. The smoke house and the meat house are never cleaned or sterilized. Flies live amid the curing and the cured product and it is usually handled in the most uncleanly and unscientific way possible. The packinghouse product is of healthy hogs, scientifically and hygienically handled. The cured products are hickory smoked and the minimum of danger to the human system results. That is the difference between factory and farm-cured pork products.

HOW TO HUNT AND HOLD TRADE

The intelligent cultivation of trade is a sure way by which to build a nation's commerce and promote the prosperity of its people. Our way is not their way. While our way may be ideal to us in its perfect adaptability to our methods, it may be a miserably disjointed and ill-applied incident when applied to a foreigner's method. A salesman or a merchant seeking trade abroad should carefully study and cater to the tastes of the local populace, select only men of recognized local standing as agents. Most people judge the value of goods by the known respectability of the agents selling them. Take Brazil and South American countries. There the above requisites are mandatory. Goods should be packed with a special regard to the effect of dampness and shipped by the quickest route possible. There is enough delay anyhow in moving goods among the Spanish Americans. Then, again, the same system of credits by which other merchants do business must be adhered to. Americans are too prone to insist upon the American way of business. The South American is sensitive. He takes offense at this and buys from the other fellow. Americans lose a lot of trade in the South because they overlook these details. Anyone who has ever lived there will say so. If business is worth having it is worth cultivating. This is accomplished more easily their way than ours.

MOST FAVORED NATION CLAUSE

The treaty cycle is approaching. There was such an event in 1891. It was then that Germany entered the field of politico-economics and made the commercial treaties with Belgium, Switzerland, Austria-Hungary and Italy. This gave Germany the same commercial advantage that France obtained after the free exchange of 1860. The effect of the most-favored nation clause has been that Europe has a sort of common tariff law in so far as concerns the items of merchandise named in these commercial treaties of Central Europe. These treaties gave Germany a commercial

lead on the continent. The best outsiders, like France and others, could do was to offer the minimum tariff for acceptance. These favored nation clause treaties expired with 1903, if a year's notice had been given. Such notice not being given continued them for another year, unless the parties mutually abrogated them at any time after January 1 of this year.

As Russia, Italy and some other Continental powers are ready to modify their tariffs, a general tariff negotiation is likely to take place this year. Germany is in a tinkering and negotiating mood. As certain governments have announced their intention to apply their new general tariffs when their future conventional tariffs go into effect, the hardship of the new commercial regime would be tempered. As the time approaches for the change in the international customs regime of Central Europe, it behooves American trade and American diplomacy to favorably lodge our commerce in the arrangement. This is a vital year in respect to these prospective European trade treaties.

VENEZUELA'S TARIFF CLUB

Venezuela has not had a friendly feeling for America since the last local uprising. In spite of the disgruntled state of the official mind down there, the United States has been able to sell Venezuela merchants some lard, butter, hams and other needed articles. This trade has been done over a tariff wall of \$3 per 75 lb. on lard, \$4 per 100 lb. on butter and \$3.47 per 100 lb. on hams. These tariffs cannot be considered reprisals, because most of the commerce which Venezuela sends to the United States comes in duty free. The principal articles which that country sends us are coffee, cocoa, rubber, balata, tonka beans and skins. All of the articles named except skins come in free, and Uncle Sam charges only 15 per cent duty on the little republic's skins. Venezuela only imports necessities from us and then taxes them an average of about 33 1-3 per cent to get in. That seems to be unfair.

TRADE SLEEPETH

Trade in all lines is sulky, flat. It is what brokers and business men call "rotten." This state of the market is not confined to the meat and provision trades. The European demand is slack and stuff has lost the buoyancy which moved it in January and February. There are inquiries, but at prices at which no one can sell. A sag was expected during Lent, but not a sag which would produce such deadness. Russia and Japan are not buying much now. The latter does not need further supplies at present, and the former cannot forward even the stocks on hand. More trade life is expected in April. The money situation has nothing to do with the present market tone.

TECHNICAL AND SCIENTIFIC

FLY PAPER FREE FROM POISON.

Stir one-half pound of quassia wood in one quart of water. Pour the water over the wood and allow it to stand overnight. Strain and boil the liquid down to one pint. Boil the wood again with one pint water until half pint remains. Mix the two infusions and add half pound of sugar. When the sugar has dissolved pass the paper through the liquid, drain and dry.

LIGHT-COLORED MEAT EXTRACT.

To produce light-colored meat extract the broth, after removal of albumen, is boiled, with the addition of hydrochloric acid to destroy the haemoglobin. After making alkaline and filtering of the precipitated phosphate of iron, the solution is again brought to its original acidity by means of hydrochloric acid. The iron may also be precipitated by adding calcium hydroxid, the excess of the latter being removed by means of a current of carbon dioxide.

A NEW CHROME TANNAGE.

The skins, prepared in the usual manner, are tumbled in a first bath containing hydrochloric acid (5 per cent.), sodium thiosulphate (2.5 per cent.), and sodium bichromate (5 per cent.) for about 12 hours. For heavy skins this liquor should be of 7 deg. B. density, and for lighter ones, 5 deg. B. The second bath contains hydrochloric acid (4 per cent.) and sodium thiosulphate (5 per cent.), and the skins are drummed in this until tanned through. They are then drummed in fresh water and finished in the ordinary manner.

CAOUTCHOUC IN CEYLON.

The area planted with Para rubber in Ceylon is estimated at 3,000 acres. The best results have been secured in the South Kaltum district, which is about 100 feet above sea level and has an average rainfall of over 98.5 inches. The soil is mostly a sandy loam. Para rubber thrives also at an altitude of 3,000 feet, and will endure a variation of rainfall of from 70.9 to 147.6 inches. Each tree produces about a pound, worth about 95 cents. The quality of the rubber is often impaired by the use of such acid liquids as lemon juice to hasten the extraction of the juices from the trees.

MANGROVE BARK AS TANNING MATERIAL.

Pieces of hide were tanned in mangrove bark liquors for about two weeks, liquors being at 4 deg. B. density. One-half were then washed till the water was no longer colored; then air-dried and analyzed. The other half were further tanned for six months in liquors, strengthened up to 6 deg. B., washed, dried and analyzed as before. Similar tests were made with an oak tannage and the results calculated to 18 per cent. of moisture, as follows: (1) Mangrove: Moisture 18.0, ash 0.2, fat 0.4, tannins 5.1, nontannins 0.4. (2) Oak: Moisture 18.0, ash 0.7, fat 0.7, tannins, 3.4, nontannins 2.06. The leather was thus fully tanned in a fortnight and the results are rather better with mangrove than with oak.

ROSIN IN VARNISH AND SHELLAC.

A method for the detection of rosin in varnish and shellac based on the solubility of metallic salts of the acids of rosin in light petroleum spirit, allows of the detection of 5 per cent. of rosin. The sample of shellac is dissolved in a little alcohol, the solution poured into water, and the fine impalpable powder which is precipitated is collected and dried. It is then extracted with light petroleum spirit, and the solution shaken with a little water containing a trace of copper acetate. If rosin is present, the petroleum spirit will be colored emerald-green.

SLIPPING OF LEATHER BELTS.

The slipping of belts is a great annoyance, not always remedied by tightening. When a ready remedy is demanded for a slipping belt, the powder known as whiting, sprinkled sparingly on the inside of the belt, is least harmful of any similar application. Powdered resin is bad, as it soon dries the leather and cracks the belt, while it is difficult to get it out of the leather, whereas, whiting may be wiped off or washed out with water. The use of water on belts, preliminary to oiling, is good. The belt should be washed on shutting down at night, or Saturday after the close of work, and then the oil applied when the belt is partially dry. Never oil or wash a belt while stretched on the pulleys. There is economy in running wide belts, wider than is the usual practice. Many a 3-inch belt has to do duty for a 4-inch belt, to the annoyance of the operator and the ruin of the belt.

SMALL QUANTITIES OF GLYCERINE.

The method of determining small quantities of glycerine consists of titrating a mixture of 5 c. c. of the liquid containing glycerine and 5 to 7 c. c. of concentrated sulphuric acid (1.84 sp. gr.) with a solution of potassium bichromate containing 10 grms. per litre. The solution is heated strongly between each addition of bichromate, which is added till the blue-green color changes to a permanent yellowish-green. The number of c. c. of bichromate solution used, divided by 2,000, gives the glycerine content in grms. per c. e. The method may be checked by estimating the amount of carbon dioxide evolved in the oxidation. This consists in adding the mixture of glycerine solution and bichromate to 10 c. c. or more of concentrated sulphuric acid in a closed tube from which the air has been removed. The sub-

stances are mixed intimately by inclining the tube several times. The reaction is finished by immersing the tube in an oil bath heated to 140 deg. C.

TANNING VALUE OF CHROMIC LIQUOR.

The tanning value of chromic liquors may be rapidly determined in the following manner:

"Two bath" liquor. To determine potassium bichromate and acid. Titrate 20-50 c. c., according to strength, with 5 per cent. solution of sodium thiosulphate (1 c. c. = 0.01 grms. of potassium bichromate) in presence of potassium iodide, using starch solution for the final point. Number of c. c. used = (a). Then titrate the same volume of liquor as used before with 1-10 N. sodium hydroxide solution, using phenolphthalein as indicator. Number of c. c. used = (C). Some of this alkali is consumed in converting the bichromate to normal chromate, and the amount combined with acid only (c) is calculated from the formula $C - (0.68) \times a = C$.

SALE OF A TRADE-MARK.

By reason of a recent decision of the Commissioner of Patents wherein interference proceedings in connection with the registration of a trade-mark were annulled, attention has again been called to the fact that a trade-mark right cannot be transferred as an abstract right. It cannot be sold apart from the article upon which it is used, the reason being that such a transfer would be productive of fraud upon the public.

"Covering this point," says the "American Soap Journal," "the United States Supreme Court has also ruled that as distinct property, separate from the article created by the original producer or manufacturer, a trade-mark may not be the subject of sale. But when any trade-mark is affixed to articles manufactured at a particular establishment and acquires a special reputation in connection with the place of manufacture, and that establishment is transferred either by contract or operation of law to others, the right to the use of a trade-mark may be lawfully transferred with it. Its subsequent use by the person to whom the establishment is transferred is considered as only indicating that the goods to which it is affixed are manufactured at the same place and are of the same character as those to which the mark was attached by its original designer."

"It is held by the commissioner that where a party claims the right to trade-mark registration by assignment from the owner of the trade-mark, yet should that assignment not purport to transfer the business as well, then the applicant is not the owner, and is not entitled to registration, as a trade-mark cannot be transferred without a transfer of the business."

OUR ELEVATORS

CAN BE RELIED UPON ALWAYS

If you wish an elevator for first class service you should take advantage of our 30 years' experience in their manufacture and consider our terms. Write for catalogue 35. It covers all the ground.

EATON & PRINCE COMPANY, Chicago

QUERIES AND ANSWERS

(CONDUCTED BY M. D. SLIMMER, PH.D.)

If you are in doubt on any question appertaining to your business, ask us freely. If the question involves expert, technical or scientific knowledge it will be referred to a specialist. This column is yours. Address all communication to the Question Editor, National Provisioner, New York.

FATS AND FATTY ACIDS.

(Concluded from last week.)

Since it has been shown that the source of the rancid taste and smell of fats is due to entirely different cause, the determination of the free fatty acids, though still of great importance, has lost its original meaning as a measure of rancidity.

We must distinguish between fats containing excessive amounts of free fatty acids, rancid fats and such as are both acid and rancid. When a fat develops free fatty acids, glycerine is also formed. Rancid fats are such as have undergone a partial conversion of the free glycerine into aldehydes and volatile free fatty acids. A fat may be both acid and rancid, when it contains many free fatty acids, as well as oxidation products of glycerine. In the development of rancidity, the free glycerine is the first substance that is affected, and therefore fats containing free fatty acids and a corresponding amount of glycerine are more prone to rancidity than others.

The bodies produced by the oxidation of glycerine belong to the chemical substances known as aldehydes and ketones. They are easily volatile with steam and have the peculiar disagreeable odor commonly present in rancid fats. This furnishes a partial explanation of the improvement in fats, after deodorizing with steam.

As the methods of testing these products are extremely delicate, we have here a means of determining the amount of rancidity in a fat. If it is distilled with steam, the volatile bodies present pass over with the steam and may then be tested for aldehydes. A solution of methylenediamine in hydrochloric acid gives a yellow color with aldehydes and ketone. The depth of this color, produced by a given weight of any fat under normal conditions, may be taken as a measure of its rancidity. In this way fats which are still

neutral to taste can often be shown to be in the first stages of rancidity.

There are a number of possible causes for the rancidity of fats. Chief among these are: The oxygen and carbonic acid of the air; ferments produced by the animal or vegetable tissues containing the fats and extracted along with them in the process of rendering; and lastly, micro-organisms.

All of these causes act in conjunction with moisture, which seems to be absolutely necessary for development of rancidity. Air affects the quality of the fat only when it is exposed to the light and higher temperatures. Under these conditions the fat becomes oxidized and takes on a disagreeable odor, but it is not truly rancid. Some fats which still contain considerable organic matter, such as butter, for instance, may grow rancid through the action of micro-organisms. As these can live only in the presence of air, the action extends from the surface inward. It is, therefore, customary to store butter in large heaps, thus reducing the surface as much as possible. In Europe butter intended for export, or to be stored for longer lengths of time, is purified by melting it at low temperatures and drawing the clear butter fat from the precipitated milk, caseine, etc.

Butterine makers have also taken advantage of the fact that the presence of organic impurities increases the tendency toward rancidity. In one large factory the oils are washed with sterilized water and are then flavored, by being mixed with the products obtained by distilling properly soured milk with steam. The steam carries over the volatile flavoring substances in the milk, but none of the bodies which would tend to cause rancidity. Such bodies are always left in butterine after churning it with milk.

We see, therefore, that rancidity is due to an oxidation of the glycerine and free fatty acids of the fats. Of assistance in this process



EXPANDED METAL LOCKERS

are built from material that is open meshed without being jointed or interwoven.

They have no cracks or crevices to accumulate dust, will not become foul or oil soaked. Admit light and air on all sides and are always dry.

Built in units made to fit anywhere.

MERRITT & CO.

1,009 Ridge Ave., Philadelphia

are moisture, sunlight, the presence of organic nitrogenous bodies, and, in some cases, bacteria and moulds. In general, the purer a fat, the less tendency to rancidity.

NEW PATENTS.

753,777. Multiple Evaporating Apparatus, Wladimir Witkowitz, Kieff, Russia. A multiple evaporating apparatus, comprising a closed vessel, a plurality of vertical partitions in said vessel arranged transversely to the same and extending from the bottom to the top of the vessel and having openings in the upper part of the partitions forming communication between one compartment and the next, and heating means in each of said compartments.

753,453. Filter, Louis F. Voindrot, Chagny, and Louis F. Boillot, Volnay, near Pommard, France. A filter, the combination with a casing of a plurality of perforated screens therein, a frame within each screen and a covering of gauze over each frame, filtering material in each screen in the space between said gauze-covered frame and the screen, and an outlet-tube passing up within said frame to the top thereof.

753,696. Filtering Apparatus, Charles E. Geiger, Louisville, Ky., assignor to himself, W. E. Koop and G. W. Fiske, partners doing business as Geiger, Koop & Fiske, and John E. Turney, Louisville, Ky. A filtering machine comprising an endless conveyer made up of rigid plates hinged together and perforated and covered with a filtering-surface element; carriers for such endless conveyer; a frame in which such carriers are mounted comprising cheeks between which the upper ply of the conveyer travels from the carrier to carrier, such cheeks being formed with ledges preventing the sagging of the conveyer between carriers, and wringing rolls in pairs one above and one below the upper ply of the conveyer, such upper ply and cheeks between which it moves constituting a trough in which the upper rollers of the several pairs operate.



THEY SAID IN THEIR LETTER "The CROSS OIL FILTER"

does all you claim for it, and hence the duplicate order."
—Hamilton (O.) Otto Coke Co.

We not only claim but guarantee the CROSS OIL FILTER to save fifty per cent. in the cost of oil, and we send the Cross Oil Filter on thirty days' trial to prove that it will.

THE BURT MFG. CO., 216 Main Street, Akron, Ohio

Largest Mfrs. of Oil Filters in the World

Also supplied by Oil Companies, Engine Builders, and Power Contractors.



D

IXON'S PURE FLAKE GRAPHITE affords at once the cheapest and the most perfect means of lubrication. It may be used dry or mixed with water, or oil greases, as the duty demands. It never fails to cure groans and stiffness in valves and cylinders, and reduced friction and oil consumption follow unfaillingly. Write for Booklet 88 C and a test sample.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.



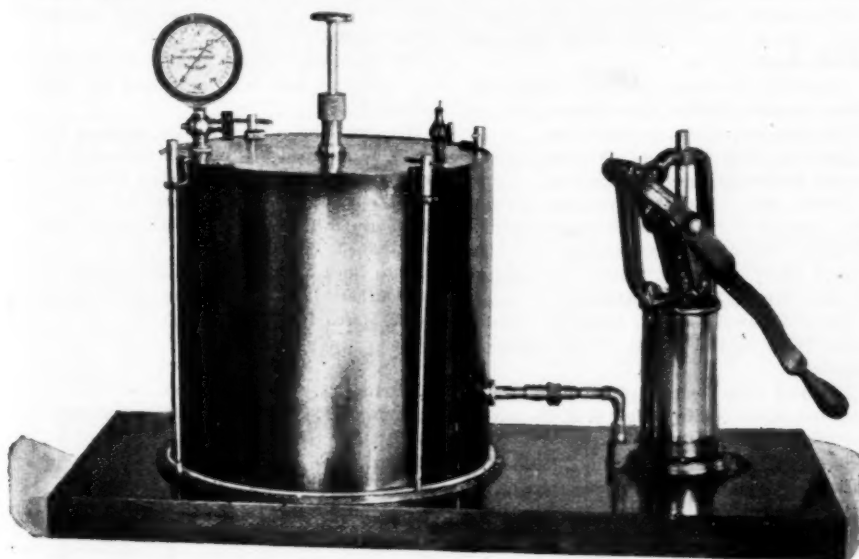
FOR PURCHASING DEPARTMENTS

A NEW VACUUM MACHINE.

Some time ago there appeared in these columns an article regarding a vacuum canning machine manufactured by the American Vacuum Can & Machine Co., of Bainbridge, N. Y. This machine has now been thoroughly tested, and has proved itself deserving of all that was claimed for it at that time, namely, very great capacity, efficient work, and a great saving of labor. These machines have

small machines is from 370 to 740 quart jars in ten hours.

For vacuum experimental purposes these machines are without equal. To all dealers who desire to perfectly preserve perishable food products in moderate quantities, this machine is indispensable. It is acknowledged frankly by packers and canners that there is no other method known which will retain successfully, without the aid of coloring



AMERICAN VACUUM CAN MACHINE.

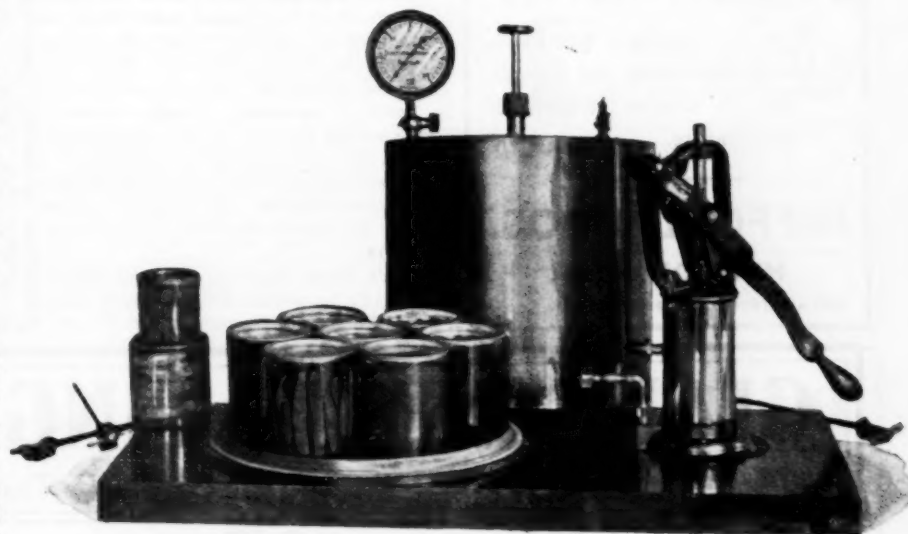
been for some time, and are now being used very successfully by some of the largest meat packers in Chicago, also by canners of fruits and vegetables on a large scale, and by preservers of butter and other milk products.

The company has had many inquiries for a machine which would do just the same efficient work as the machine above mentioned, but having smaller capacity and which could be purchased at less cost. Realizing this need they have acted upon the suggestion of their inquirers, and having attained successfully the end in view, again come to the front with a machine not only intensely interesting to the packing world, but also of great advantage.

Two cuts of the new machine appear on this page, one showing the machine closed ready for operation, and the other showing the machine open after the operation has been completed and the filled jars sealed. This machine will do the same and as good work in every particular as the large machine; it is easy to operate, and very simple in construction, there being no complicated mechanism to get out of order. It can be operated on a table one and one-half feet wide by three feet long; it is complete within itself, needs no appliances of any kind, and is operated by hand, although it may be operated by belt power if desired.

To draw the required vacuum, seat the covers on the filled jars, and hermetically seal them requires from 7 to 10 minutes. These machines are made in two sizes, accommodating six and twelve quart fruit jars respectively, thus the capacity of even these

preparations or preservatives, the natural color, form, flavor and aroma of the article canned. All this can be done with the ma-



CAN MACHINE AFTER CANS ARE SEALED.

chines and process of the American Vacuum Can & Machine Co. as the display of meats, fruits, vegetables, cottolene, molasses and other perishable articles which are on exhibition at its office will testify.

The company has just issued a new booklet descriptive of its machines and jars which it will be pleased to mail to any one interested.

LARGE ELECTRICAL EXHIBIT.

In the Machinery Hall at the World's Fair the exhibitors' power plant will be installed in the western division. The largest piece of electrical apparatus in this installation is the 3,500 k. w. Bullock generator. The nominal rating of this machine is 3,500 k. w., 6,600 volts, 25 cycle, 3 phase, running at 75 r. p. m. engine type, and built by the Bullock Electric Manufacturing Company of Cincinnati, Ohio. This generator is connected to an Allis-Chalmers compound single crank engine, the total weight of this engine and generator being 300,000 pounds. The overall dimensions of the floor space taken up by this generator set is 35 x 44 feet, and the total height, including the base, is 54 feet.

UNLUCKY BUT HOPEFUL.

The American Blower Co., Detroit, recently advertised for a cook for the restaurant they are about commencing for the benefit of the fifty odd members of their office and drafting room force. Among the many applications received, one is so unique that they consider its humor worth sharing. It reads as follows:

Detroit, Mich., February 26, 1904. City. Dear Mum: Please Miss I seed the advertisement in the paper where you wanted one servant lady. Please miss is the work hard. I cant stand hard work, but I will do me best at it mum. I never was brought up in the city so I dont know much about cooking, but I'll do me best. Please Mum give me the job for I need it bad. I was married, but my husband forgot me. Now aint that a shame mum. However mum I feel this way there are lots more thanks to the good Lord. Now Mum, I niver do any washing or hard work, but if its a lady your looking for Mum, I'm the one you want. Please answer this

mum for its nothing I have in the world mum but your kind wishes for me welfare. Good by Mum. Ans. quick. Yours truly, Mary."

CABLE ORDER FROM FRANCE.

A cable order from Paris, France, for a large shipment of Cross Oil Filters has been received by the Burt Mfg. Co., Akron, O.



ICE ELEVATING —AND— LOWERING MACHINE

Operated by Horse Power.
Suitable for filling large ice-boxes and for use at Packing Houses.

Readily moved from one door to another.

Write for Catalogue and Price-List, illustrating and describing all modern methods of handling ice.

GIFFORD BROS.
HUDSON, N. Y.

ESTABLISHED 1814

ICE AND REFRIGERATION

CORPORATION NEWS.

Capital Creamery Company, Des Moines, Ia.; capital \$50,000. Charles Harding, Omaha, Neb.; Keller J. Bell and Nelson E. Wescott, Des Moines, Ia., incorporators.

Oklahoma Creamery Company, Guthrie, O. T.; capital \$15,000. J. E. Stott, Chicago; Robert S. Goss, R. F. George and Henry M. Ferguson, Guthrie, incorporators.

Shurs Coal & Ice Company, Manayunk, Pa., has been incorporated.

Sherbourne Creamery Company, New York City; capital \$15,000. William H. Wild and others, incorporators.

Excelsior Creamery Company, Excelsior, Wis.; capital \$15,000. Paul Schoon, George E. Hackett and others, incorporators.

Sanitary Milk Company, Windsor, Mich.; capital \$30,000 has been incorporated.

Oconto Falls Creamery Company, Oconto, Wis.; capital \$4,200. John Fitzgerald, Henry Lembecke and others, incorporators.

Ohio Dairy Company, Toledo, O.; capital \$20,000. Henry A. Page, manager.

Wood River Creamery Company, Wood Lake, Wis.; capital \$5,500. John Sveenran, president.

Sterilized Milk Company, 79 Hudson street, Hoboken, N. J. W. O. O'Hea, C. H. Pennover and others, incorporators.

Escanaba Creamery Company, Escanaba, Mich., capital \$4,000, has been incorporated.

Schenectady Cold Storage and Produce Company, Schenectady, N. Y.; capital \$200,000. S. R. James, C. C. James and J. E. Ragan, directors.

Corcoran Fitzgerald & Company, New York City; capital \$50,000. J. R. Fitzgerald, T. J. Corcoran and L. M. Aldrich, incorporators. To deal in ice.

Trans-Continental Refrigerator Car Company has been incorporated under Massachusetts laws with capital of \$1,000,000, to manufacture and operate refrigerator cars and to own and operate cold storage plants.

Portland Creamery Company, Portland, Ind.; capital \$10,000. J. A. Long, president; Lee G. Holmes, secretary and treasurer.

Citizens Plate Ice & Cold Storage Company, Belleville, Ill.; capital \$60,000. Adam Gintz, Thomas Fischer and others, incorporators.

Rich's Jersey Creamery Company, Cattaraugus, N. Y.; capital \$20,000. H. W. Rich, C. J. Rich and others, incorporators.

Kingman Creamery Company, Kingman, Mo., capital \$3,000, has been incorporated.

Pleasantdale Dairy Company, Portland, Me.; capital \$10,000. G. L. Libby, South Portland, president and treasurer.

Montpelier Ice & Coal Company, Indianapolis, Ind.; capital \$15,000. George H. Detmiller, Oliver C. Heasler and others, incorporators.

FIRE AND ACCIDENT RECORD.

Germantown, N. Y.—The cold storage plant owned by John R. Greene has been burned. Loss, \$10,000.

Wichita, Kan.—The ice plant of the Crystal Ice Company has been destroyed by fire. Loss, \$50,000.

Winslow, Kan.—The large ice house of the Santa Fe Railroad was recently destroyed by fire. The loss is several thousand dollars.

Montreal, Canada.—The butter and cheese warehouse owned by D. A. McPherson has been burned. Loss, \$10,000.

South Rock Mount, N. C.—The ice plant of the Southern Ice Company was destroyed by fire on March 17. Loss, \$50,000.

NEW PLANTS.

Gorham, Pa.—John Flanagan will build a cold store in connection with his produce business.

Peoria, Ill.—Steers Brewing Company of Chicago will build a cold store.

Camden, N. J.—Joseph Baumgartner of Sioux Falls, Ia., will build a brewery.

San Jose, Cal.—American Brewing Company, of Peoria, Ill., will build a cold store. Lawrence Hagny is manager.

Ashland, Ore.—F. L. Nelson and Fred. M. Carter will build an ice and cold storage plant.

Hamilton, Tex.—Hamilton Ice & Manufacturing Company will build an ice plant.

Atlanta, Ga.—Atlanta Oil & Fertilizer Company will build an ice plant. W. M. McKenzie is president.

Waterloo, Ia.—Rath Packing Company will increase capacity of ice plant.

Oakland, Cal.—Woods Brothers will build a large creamery.

Newton, Miss.—Newton Oil & Manufacturing Company will build an ice and cold storage plant.

St. Louis, Mo.—Krenning Realty Company will build a cold storage and ice plant to cost \$55,000.

GIANT INSULATING PAPERS

STANDARD FOR EIGHTEEN YEARS



POSITIVELY SUPERIOR TO ALL
OTHER INSULATING MATERIALS

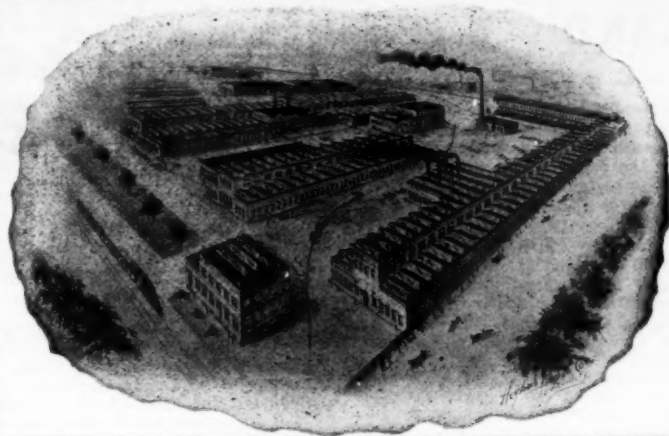
PERMANENT INSULATION ENSURED

Sole
Manufacturers

THE STANDARD
PAINT COMPANY

CHICAGO OFFICE:
188-190 Madison Street

100 William Street
NEW YORK



Henry Vogt Machine Co.

**ICE and REFRIGER-
ATING MACHINERY**

Louisville, Kentucky.

Baltimore, Md.—Baltimore Refrigerating & Heating Company will increase ice plant.

Los Angeles, Cal.—Home Ice & Cold Storage Company has secured a permit for the erection of an ice plant to cost \$38,000. F. C. Adams is the builder.

Wichita Falls, Tex.—M. Marcus will build and operate an 18-ton ice plant.

Lockport, N. Y.—Campton & Lewis, Pittsburg, Pa., will build a \$50,000 cold storage plant.

Independence, Mo.—Ben. F. Qualtrough, of Kansas City, Mo., and W. Dickey, of Topeka, Kan., will build an ice plant.

FRESH AND COLD STORAGE BUTTER.

There has been little change in the butter market during the last week. The market was steady and there was very little export trade. Receipts in New York, 28,929, against 32,503 for previous six days. Prices on March 23: Creamery extras, 24c., do. firsts, 20@23c., do. seconds, 17@19c., do. thirds 15@16c.; Creamery, held extras, 19@20c., do. firsts 16@18c., seconds 15@15½c. State dairy, firsts, 19@21c.; do. seconds, 15@17c. Western factory, held 13@14½c.

In Philadelphia market steady at 24½ for extra creamery; do., firsts, 23½@24c.; do., seconds, 16@19c.; held creamery, 15@20c., as to quality.

In Boston, market was lower, 23½c. being quoted for creamery extra and other grades in sympathy. Stock in cold storage, 77,086, as compared with 53,243 at same date last year. In Chicago market was steady at 23½c. for best creamery.

FRESH AND REFRIGERATOR EGGS.

The first shipments of eggs packed for cold storage have arrived from the West, and a number of carloads have been put away in the coolers in the vicinity of New York. Receipts have greatly increased during last week, and 129,463 cases came to New York up to March 24, as against 79,642 cases for the previous six days. There was a drop in prices and as low as 16½c. was quoted. The lowest prices for eggs for storage was quoted at 17c. in New York. In the West there has as yet been no great movement into the coolers. The price asked by producers did not go below 16c. for future delivery, a few small lots selling at 15½c. on board cars. Prices in New York, March 23: Nearby fresh, extra, 17c.; do. firsts, 16½c.; do. seconds, 16@16½c.;

Kentucky, 16½c.; Southern, seconds to firsts, 15½@15¾c.

In Boston there was a marked increase in receipts, and prices dropped 3c. The market was steady. Fresh gathered extra, 17@17½c.; do. firsts, 16½@16¾c. Receipts for week, 34,128, as against 17,468 for previous week.

In Philadelphia the market sympathized with Boston and quotations only ½c. lower. In Chicago the market was steady. Extras 17c.; firsts, 16@16½c.

W. H. BOWER. GEORGE R. BOWER,
General Manager. Secretary and Treasurer.

The AMMONIA CO.
OF PHILADELPHIA

Gray's Ferry Road and Twenty-ninth Street
PHILADELPHIA, PA.

26° AQUA

Especially Refined and Purified for
ABSORPTION MACHINES

ANHYDROUS

ALWAYS PURE ALWAYS DRY



**DISTILLED FROM PURE
AQUA AMMONIA OF OUR
OWN MANUFACTURE**

FOR REFRIGERATING AND
ICE MAKING

WERLIN VALVE

WRITE FOR BOOKLET

NEW YORK: Roessler & Hasslacher Chemicals
Co., 100 William Street.

CHICAGO: F. C. Schapper, 16 N. Clark Street.

CINCINNATI: C. P. Calvert, 9 E. Pearl Street.

MILWAUKEE: Central Warehouse.

ATLANTA: Southern Power-Supply Co.,
406 Century Bldg.

**NEPONSET
AND
LAMINOID
INSULATING
PAPERS**

F. W. BIRD & SON - ESTABLISHED 1877
EAST WALPOLE, MASS. - NEW YORK - CHICAGO

AMERICAN LINDE REFRIGERATION CO.

ICE-MAKING AND REFRIGERATING MACHINERY

AMERICAN LINDE PATENT AIR CIRCULATING SYSTEM

**Keeps Meat in Better Condition and for Longer Time
Than Any Other System**

INSURES PURE AIR—SWEET MEAT—NO MOULD—BEST COLOR

FURTHER INFORMATION ON REQUEST

PROVISIONS AND LARD

Weekly Review

All articles under this head are quoted by the bbls., except lard, which is quoted by the cwt., in tos., pork and beef by the bbl., or tierce, and hogs by the cwt.

Still Feverish Situations—Firm Tendencies After Bearish Movements—Cash Demands Somewhat Improved, Yet Unsatisfactory—Hog Receipts Moderate and Favoring Firmer Product Markets.

It has been a peculiar situation of affairs for hog products.

There is a line of prices for hogs which should give exertions for better prices of the products. Yet that the temper of speculation in the products continues of an erratic character and that when reactions in prices have taken place to a little better trading basis that they have been followed by upset markets. The position, however, at this writing looks a little more secure.

The belief is that there is a very fair long interest still out, and which has held to its holdings confidently through all of the attempting shaking out period, and as with the impression that there will be a material reaction from the late order of affairs. These "longs" at the close, grip their holdings with even more confidence.

It may be said, however, that the feeling among the longs that there would be a rally from the sharp declines had within the last few weeks was based more upon expected ordinary developments after a stampede of speculative interest, and had only the additional feature of the high cost of hogs with the products, by which latter the reasoning was that the products stood a good prospect of rallying, especially as there was little probability of success in working against the views of the farmers concerning the prices of the hogs.

Under ordinary conditions the logic concerning the respective prices of hogs and the products would have answered for hopes among the "longs" as to the prices of the products soon recovering from their late depression.

But the extraordinary developments latterly in the quieting of new "long" speculation, not only in hog products, but in grain and cotton, left many of the products depending more upon supplies and demands for cash stuff, while missing the vigor which comes about through buying of the public.

Unquestionably the weakened speculation in hog products, and the late frequent drift of them to lower prices was helped in a marked degree for the most part by the easier drift of prices for grain. The fact that corn prices have been considered by many traders too high kept them at times as working more upon a direct influence; but wheat went lower early this week, through the fine weather for the winter crop, with the more important growing sections getting needed rains. The prices of grain generally have been so substantially reduced from the top prices of the winter season, and as results in part of subdued speculation, that it was not surprising that hog products were in line with the movement for lower prices. Just now, however, grain prices are becoming stronger as well as those for products.

The recent cotton failure and some bullish feeling which had been had from the cotton interests in the hog products is now dismissed. The outside speculation in the hog products, therefore, is of a very narrow order, as concerns new deals, while it consists chiefly in protecting old contracts.

There were reports early this week that there was some desire to go "short" of hog products on the part of the outside speculators. But this was hard to understand, in

the consideration of the sharp declines the products prices had had, and with the understanding of the hog situation, in its supplies and prices.

While it would seem to have been a condition of affairs that called for more than usual caution, yet it would seem to have been exceptionally risky to go "short" of the market for them at the current reduced prices.

Hog prices are necessarily higher, with today (Thursday) an advance of 5@10c. for them, on their moderate receipts at the packing points, and this follows an advance for them of 5c., the day before, upon which day the product markets were lower.

It was an abnormal situation.

There would be a substantial reason from the hog market influence for higher priced products, and that the situation for them is held down proves a surprise to all traders and can be accounted for only by the outlined features, and which are apt to disappear at any time. It must be considered that hog prices are hardly 25 points lower than the outside trading basis for them in February, while pork is more than \$3 per barrel lower than then, and lard about 125 points cheaper.

The packers have been good sellers of the products on rallies, and bought a little on every decline. There would seem to be towards the close more of a disposition among packers to absorb the offerings.

The receipts of hogs at the packing points on Wednesday and Thursday were materially under the estimates for those days, while on Thursday the estimate for the succeeding days receipts at Chicago were only 17,000.

It would be hard to understand the moderate receipts of hogs from some of the trade assigned reasons, in that there is dissatisfaction of farmers with the selling prices for them, and, in a degree, from the poor condition of the roads over the west for marketing the hogs. Rather we think that the hog supply is of an ordinary order, and not likely to be exceptionally large, from the fact that the weights of the hogs are steadily moderate,

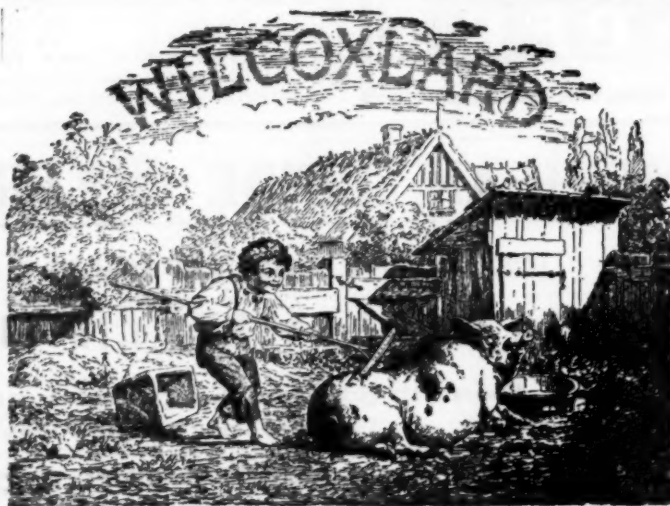
THE W. J. WILCOX

LARD AND REFINING COMPANY

NEW YORK
OFFICES: 27 Beaver Street

Refiners of the Celebrated
Wilcox and Globe Brand

PURE
REFINED
LARD



CARROLL S. PAGE, HYDE PARK, VT.

Green Calfskins, Country Hides, Sheep
Pelts, Tallow, Bones.
Wool Puller and
Tallow
Manufacturer of
Page's Perfected
Poultry Food

CINCINNATI PROVISION EXPORT CO.

401 Chamber of Commerce, Cincinnati
214 Produce Exchange, - New York
Exporters of Pork Products
Lard a Specialty
Correspondence Solicited.

and which would seem to show that the hogs have been promptly sent forward as they came up to marketable condition. Moreover, it would appear to be against reason that the farmer would hold hogs back for any length of time in order to get a little better price for them (a little better price only would be possible), in consideration of the high prices for corn, however lower the grain is from its top prices, and the comparatively poor prices for hogs.

The average weight of the hogs at Chicago last week was 206 lbs., against 210 lbs. the previous week, 217 lbs., corresponding week in 1903, and 217 lbs. in 1902.

The price of hogs are now about \$2.50 per 100 lbs. lower than at this time last year, while corn is 9c. per bushel higher than then.

Last Saturday pork closed 2c. higher, lard 10@15 points and ribs 10 points up. On Monday, pork closed 15@17 lower, lard 2@5 points and ribs 7 points off. On Tuesday pork was down 5, lard 2@5 points, and ribs 2 points up. On Wednesday the close showed declines of 12 for pork, 7 points for lard and 5 points for ribs. On Thursday the prices were all higher, with hogs and grain.

In New York there has been a further reduction in the prices of mess pork, of which sales of 300 bbls. at \$15@15.50. Other pork is weaker; sales of 250 bbls. short clear, \$14.50@16.25; 150 bbls. family, \$15.25@15.50. Western steam lard went down to about 7.15 for cash lots; 750 tes. sold on p. t. for export. City steam lard sold down to 6.50@6.62½ for 300 tes. for export. Compound lard was put down to 6.75 for car lots. City meats are very slow, with some weakness as to prices, especially for pickled hams, which have accumulated in supply rather freely; sales of 4,500 loose pickled hams at 9½@10½c.; pickled shoulders sold at 6¼@6½c. for 3,500. Pickled bellies, loose, sold for 55,000 pounds at 7½@7¾c. for 12 lbs., 7¼c. for 14 lbs. and 16 pounds ave., and 8c. for 10 lbs. ave.

Exports for week from Atlantic ports: 3,966 bbls pork; 8,906,302 lbs. lard; 10,340,362 lbs. meat. Corresponding week last year: 2,056 bbls. pork; 11,258,436 lbs. lard; 9,461,043 lbs. meats.

BEEF.—English shippers are slowly bidding; prices are easy; city extra India mess. tes., \$15@15.50. Barreled lots are fairly well sustained on light sales; mess, bbls., \$9.50@10; packet, \$10.50@11; family, \$11.50@12.

PRODUCE EXCHANGE NOTES.

Proposed for membership: Charles W. Gillett (broker); A. P. Plant (grain broker).

New members: D. Cornell Link (with David C. Link); Irving Bunnell, C. A. McKinstry, Jay F. Browne, George B. Buchanan, Walter Fitch.

Visitors: James B. McMahon (2d vice-president of the N. K. Fairbank Co.), from Chicago; E. T. George (prominent in the cottonseed oil interest), from New Orleans; W. A. McCaw (McCaw Manufacturing Co.), Macon, Ga.; J. Evans, London; L. Philipp, Rotterdam; Clement Scott, Edinburgh; W. Hyman, Amsterdam; L. M. Terry, Mexico; F. B. Wells, Minneapolis; A. C. Wieland, Montreal; Henry Grev, St. Louis; W. B. Jerolamon, L.

HIDES AND SKINS

(Shoe and Leather Reporter.)

CHICAGO.

Native steers, spready.....	11½ @ ..
Native steers, heavy.....	10½ @ 10¾
Native steers, light.....	9½ @ 9¾
Texas steers, heavy.....	11½ @ ..
Texas steers, light.....	10½ @ 10¾
Texas steers, ex. light.....	9½ @ 9¾
Butt-branded steers.....	9½ @ 10
Colorado steers.....	@ 9¾
Native cows, over 55 lbs.....	9½ @ 9¾
Native cows, under 55 lbs.....	@ 9½
Branded cows.....	@ 9¼
Native bulls.....	@ 8½
Branded bulls.....	@ 7½
Pates, per 100 lbs.....	@ 85
Trimnings, per 100 lbs.....	@ 75
No. 1 heavy steers.....	9 @ 9¼
No. 2 heavy steers.....	8 @ 8½
Side-branded steers, flat.....	8 @ 9
Side-branded cows, flat.....	7½ @ 8
No. 1 heavy cows.....	@ 8½
No. 1 buff hides.....	8½ @ 8¾
No. 1 ex. light hides.....	8½ @ 9
No. 2 buff hides.....	7½ @ 7¾
Bulls, flat.....	7½ @ ..
No. 1 calfskins.....	12¼ @ 13
No. 1 kips.....	9½ @ 10
Deacon skins, each.....	.65 @ 85
Slunks, each.....	.40 @ 60
Horsehides, each.....	3.55 @ ..

Sheep Pelts.

Green salted pelts, packer lamb.....	1.15 @ 1.27½
Green salted packer sheep.....	1.40 @ 1.50
Green salted country pelts.....	.85 @ 1.25
Dry pelts, Montana, butchers' full wool.....	.12 @ .12½
Dry pelts, Utah butchers' full wool.....	.11½ @ .12
Dry pelts, Wyoming butchers' full wool.....	@ .12
Dry pelts, Colorado and New Mexico, butchers' fair run.....	@ 11
Dry flint shearlings, good stock.....	10½ @ 11
Dry flint shearlings, damaged.....	.3 @ .7
Dry murrains, Montanas and Utahs.....	.12½ @ .12¾
Dry murrains, Colorados.....	.11 @ .12

BOSTON.

Dry—Selected.

California.....	21 @ 25.19 @ ..
Southern.....	.13 @ 14
San Antonio.....	.18 @ ..
Texas.....	21 @ 28.17 @ 17½

Salted.

Brighton, abattoir steers.....	9¼ @ ..
Brighton, abattoir steers, butt branded.....	8¼ @ ..
Brighton abattoir cows.....	8½ @ ..
New England cows, green.....	6 @ 6½
New England cows, salted.....	8 @ 8½
New England steers, salted.....	9 @ ..

Wet Salted.

Southern.....	35 @ 40. 7½ @ 7¾
Texas ox and cow.....	.60 @ 70. 7¼ @ 7½
Western cows.....	8½ @ 8¾
Western seconds.....	7½ @ 7¾
Extremes.....	8½ @ ..
Extremes seconds.....	7½ @ ..

Calfskins.

Dairy.....	60 @ 65
4 to 5 lbs.....	80 @ 85
5 to 7 lbs.....	95 @ 1.00
7 to 9 lbs.....	1.25 @ 1.30
9 to 12 lbs.....	1.60 @ 1.65
12 to 16 lbs.....	1.85 @ 1.95
16 to 25 lbs.....	2.20 @ 2.25

NEW YORK.

Selected.

City Natives—60 lbs. and over.....	9¼ @ 10
City butt brands—60 lbs. and over.....	@ 9¼
City Colorados—60 lbs. and over.....	@ 9
City bulls—all weights.....	8 @ 8
City Cows—all weights.....	9 @ 9¼

City Calfskins.

5-7.....	\$1.12½ @ 1.15
7-9.....	1.40 @ 1.45
9-12.....	1.65 @ 1.70

Country Calfskins.

5-7.....	\$.95 @ 1.00
7-9.....	1.25 @ 1.30
9.....	1.55 @ 1.60

PROPOSED FRENCH OLEO LAW.

A commission appointed by the French chamber of deputies to consider a bill introduced by the Minister of Agriculture amending the law relating to the sale of oleomargarine and adulterated butter has issued a report favorable to the bill. The law requires manufacturers of oleomargarine, at the time of making it, to mix with it, under official inspection, some harmless matter which, while not coloring it in imitation of butter, will facilitate the analysis and identification of the commodity. The bill further prohibits the importation of oleomargarine from any country which does not provide for the mixture of some substance that will render it easily distinguishable from butter.

OLEO EXPERT DEAD.

George F. Twitchell, for many years superintendent of the Capital City Dairy Company, of Columbus, O., and a recognized oleomargarine expert, died at his home in Columbus last week of heart failure. Mr. Twitchell had not been connected with the Capital City Company for about a year.


Antwerp, 1894


Paris, 1900

THE LUNKENHEIMER SPECIALTIES

Honestly made and always of good value; wherever exhibited invariably carry off the highest honors. Specify "Lunkenheimer" make and order from your dealer. Write for catalogue of Superior Brass and Iron Valves, Whistles, Injectors, Lubricators, Oil Pumps, Oil and Grease Cups, etc. All goods tested and inspected, and warranted to satisfy.

THE LUNKENHEIMER CO.

CINCINNATI, OHIO, U. S. A.

Branches: New York: 26 Cortlandt Street.
London: 35 Great Dover Street, S. E.


Cincinnati, 1874-5


Buffalo, 1901


Omaha, 1898-9


Chicago, 1893


New Orleans, 1896


Selma, 1893


Philadelphia, 1896

TALLOW, STEARINE, GREASE and SOAP

Weekly Review

TALLOW.—There has been no marked increase in the amount of business, either at the eastern or western markets. The situation as to prices remains essentially as in the previous week; the few sales taking place have shown it.

The soapmakers still keep alive their before alluded to conservative policy, and seem determined to await more significant features, either from developments of allied fat markets or from some determining feature direct with tallow, and which could come up more especially from the tone of foreign markets.

And a point of interest this week has been a sale of 100 hhds. city tallow for Scotland at 4½c., and which was essentially the trading basis before paid by our home soapmakers, and who are not especially anxious to buy at it.

The argument which we had used latterly in connection with the tallow market was that our market trading prices stood very close to an export basis, and that they would have to decline in England for indulgence of expectation of our home soapmakers of easier priced tallow. There are no signs, as yet, that the foreign markets are disposed to weaken.

The associated fat markets, those which influence the tallow position, as concerns interest of our home soapmakers, more especially as they influence compound makers' demand for tallow, or give sentiment to the entire fat situation, and notably the lard market, are not, as yet, showing enlivened features. Because of the hog fat position trading in tallow drags on home account, since it is recognized that depressed or unsettled lard prices abate confidence in all fat positions.

Nevertheless export demands, as they may come about or remain quiet, as the near future show them, will have something to do with the tallow market. The export sale this week was the first on a direct order to buy in many weeks, and caused some little comment. No further demand, however, has since come from the shippers.

So far as concerns a favorable influence from the lard market it does not seem probable that it will come right away.

Although lard is looked upon as likely to show as the season is much further advanced a better line of prices, yet there would seem to be nothing in the near future of it for permanently markedly higher prices for it, outside of the consideration of relatively high cost of hogs. The late bearish speculation in grain and which was followed on hog products, and by which the public as speculators was driven out of the market, is not likely to be displaced at once, or activity resumed. Although the late low prices for the lard are looked upon as an inside basis for the near future, with fluctuations to higher prices, as likely to be followed by reaction. In other words, the lard market is not likely to take on at once the necessary confident tone for

giving assurance in buying other fats freely for accumulation.

It is now said that the buying of peanut oil in Europe has reached nearly 20,000 bbls., although we cannot get particulars of more than 12,000 bbls., but it will be a long time before this all gets forward. It would, of course, displace with our home soapmakers just so much cotton oil or tallow.

The London sale on tallow on Wednesday showed unchanged prices, with 89 casks sold out of 355 casks offered.

City tallow in tierces has 5c. bid; it would probably bring 5½c.; not much of it is now put up because the melters recognize the fact that tierced tallow is little wanted for the present.

Edible is quoted at 5½@5¾c.

The country made is moderately dealt in at steady prices, with sales of 200,000 lbs. in lots at 4½@5½c., as to quality; some nice lots for more money.

Friday's closing market on page 42.

OLEO STEARINE.—The late depression in the lard market by which the compound lard business became dull and the necessity of again reducing prices of compounds to 6¼c., tended, of course, to keep the stearine market quiet; and with the prolonged inaction the pressers came down another ¼c., with sales in New York early in the week of 100,000 lbs. city to a local compound lard maker at 6¾c. There was further demand at that price, and some difficulty in obtaining supplies. Other sales, 60,000 lbs. out-of-town made at 6¾c. The situation has rather an uncertain look. The western markets are slow and unsettled, with 6¾@7c. quoted.

LARD STEARINE.—Refined lard business is rather slow, and the stearine is little wanted outside of the makes of the refiners themselves. About 7c. for western and 7¼c. for city; sale at 7c.

COCOANUT OIL.—A confident market for near deliveries on moderate offerings. Somewhat unsettled for the shipments. Ceylon, spot, 6¾@7c.; April and May arrivals, 6½@6¾c.; Cochin, spot, 7¾@7½c.; April arrivals, 7¼c.; March and May shipments, 7c.

NEATSFOOT OIL.—Some export business in best cold test at a strong price; otherwise moderate jobbing business and very regular prices; 20 cold test, 98; 30 cold test, 85; 40 cold test, 67@68; prime, 50; dark, 47@48.

CORN OIL.—Holds up well in this market, with, however, a more conservative export business. Quoted at \$4.20@4.40, for second-hand and first-hand holdings.

PALM OIL.—Prices supported on small stocks; Lagos, 6½c.; red, 6¼c.

GREASE.—Foreign markets have taken a few lots of low grade. Home pressers and soapmakers doing little because of the unsettled general fat markets. Yellow, 4¼@4¾c.; house, 4¼@4¾c., and bone, 4¾@4¾c.; "B" white, 4¾@4¾c.; 5¼@5½c.

GREASE STEARINE.—Some nice goods

could not be had within ¼c. and perhaps ½c. of quotations. Not much doing, but offerings light. Yellow, 4¾c.; white, 5¼c.

OLEO OIL.—Rotterdam continues dull all around, with no briskness to its butterine trading. Prices are a little slack with more caution exercised because of the general fat markets in this country. New York quotes choice 8c.; prime, 6¾c.; low grade, 5½c. Neutral lard quoted about 7½c. here and 46 florins in Rotterdam.

COTTONSEED STEARINE.—Would bring about 5½c. per lb.; but is inactive with little on sale.

LARD OIL.—Market does not vary fully with lard, since it had not advanced on any recent upward spurt of it. Trading is in job lots. Prime quoted about 61@62c.

MEXICAN CATTLE IN CUBA.

Mexican ranchmen are becoming more and more interested in the matter of exporting Mexican cattle to Cuba to be fattened on the Cuban plantations. It has been discovered that the cattle from the Mexican highlands are not fitted for the Cuban trade. They sicken and die in the warmer climate and do not fatten on the southern grasses. They also die in large numbers before becoming acclimated. American cattlemen made the discovery and have changed the method of shipping the mountain stock to Cuba. The prices in Spanish gold which Mexican cattle fetch at Havana are about as follows, according to a returned stockman:

Bulls (4 to 6 years old), \$30 to \$32; two-year-old bulls, \$20 to \$22; two-year-old heifers, \$20 to \$21; sterile cows under 10 years old, \$24 to \$26; breeding cows, \$27 to \$30.

The duties on Mexican cattle entering Cuba are high. They are as follows:

Bulls and fat steers, \$7 per head; lean bulls and steers up to 700 lbs, \$2 per head; young bulls, \$2 per head; yearling steers, \$1 per head.

There is no duty on sterile cows or those not over ten years old that have dropped calves. Neither do heifers or heifer calves pay duty.

MACHINERY FOR AUSTRALIA.

American makers of machinery of all sorts will be interested in the report of United States Consul Baker of Sydney, New South Wales, made recently to the state department. He states that there is a great demand in that country for up-to-date machinery of every kind, agricultural, milling, manufacturing, etc., and recommends the more thorough development of the field.

Prime Green Olive Oil Foots

UNCLE SAM BRAND

QUALITY, THE SUPREME TEST

They cost a little more than ordinary Foots but if you buy "UNCLE SAM BRAND" you will be so pleased with the results that you will forget the price and always remember the quality

Welch, Holme & Clark Co.,

383 WEST STREET
New York City

COTTONSEED OIL

Weekly Review

THE NATIONAL PROVISIONER is an official organ of the Interstate Cottonseed Crushers' Association, and the official organ of the Oil Mills Superintendents' Association of the United States.

Decidedly Weak Position—Marked Pressure in Selling at New York—Easier Prices at the Mills—Tameless Based upon the Slow Consumption and the Held Down Lard Market.

The course of the cotton oil market has been radically more with buyers through the week, and especially as relating to New York, although it was unquestioned that upon any effort of the mills to sell their holdings of crude that declining prices were necessary for them. And that small lots of crude have been sold at lower prices.

It did not follow, however, that the mills, as a whole, on large lots were willing to accept such lower prices as would have been necessary to market their supplies at all freely. There were a number of small lots placed by the mills, first at $\frac{1}{2}$ c. decline from the prices made by them in the previous week, and afterwards at an additional $\frac{1}{2}$ c. connection. In other words, crude, in tanks, which had been sold at the close of the previous week at the South-east mills, in small lots, at 30c., was sold at the beginning of this week at $29\frac{1}{2}$ @30c., and thereafter some small lots were picked up at 29c. There are some points in the South-east with favorable freight rates that have $29\frac{1}{2}$ c. bid.

And the refined, prime yellow grade, sold on Tuesday, in New York down to $36\frac{1}{2}$ c. for March, $36\frac{1}{2}$ c. for April, $36\frac{1}{2}$ c. for May, $37\frac{1}{2}$ c. for July, and 37c. for September. These prices were about $\frac{1}{2}$ c. under the trading basis at the close of the previous week. There had been a little firmer feeling the day before (Monday) and as stimulated then by some hope of a recovery in the lard market, and the expectations thereupon that the consumption of the oil would be increased: therefore that there would be an influence in helping the compound lard business. But on Tuesday there was before the close of the day's trading some pressure again on lard, and the cotton oil market drifted to the indicated easier basis, and had working upon it besides several weak features, as particularized further along in this review.

On Wednesday the pressure upon cotton oil prices continued, under which there was a further decline in its prices of $\frac{1}{4}$ c. per gallon for the refined in New York; May delivery of prime yellow here then sold down to 36c., and July to 37c., while March delivery had only

$35\frac{1}{4}$ c. bid, and it was offered at 36c., and September delivery was offered at $36\frac{1}{2}$ c. There was a decided decline in the pure lard market on that day, although small reactions in it on the dealings just at the closing trades.

On Thursday the market continued feverish—sales early 1,000 bbls. prime yellow July at 37c., afterwards at $36\frac{3}{4}$ c.; April at $35\frac{3}{4}$ c.; May at 36c.; June at $36\frac{1}{4}$ c. (The closing prices for Friday will be found on page 42.)

The features of the market are as follows: A continued dull compound lard business, by which the compound lard makers are very indifferent in buying cotton oil; a necessary further decline in the prices of compound lard, which is now selling in New York at $6\frac{3}{4}$ c., and this is all on account of the distrust of the lard market and the consequent very conservative buying of all fats. Then again there has been the Sully failure in the cotton trade and the consequent upset cotton market, and which has somewhat demoralized speculative inclinations, and abated some of the sentiment over allied products, not only here but over the South. The loss of confidence is certainly bringing out more held back cotton, and there is a deduction of an ordinary significance, as well, that formerly held views all around among people who had entertained bullish sentiments for cotton, cotton seed and its products are set back, at least temporarily, by the developments in the cotton trade speculation. Another point to the same temper of cotton oil has been, as noted in our previous week's review, that it was hard to expect other than weak conditions for the oil because of the look of associated fat markets, notably that for lard; and, as well, the consideration that there would be the usual desire at this season of the year to get the crude oil holdings upon as reasonable a basis of prices as possible for buying. Besides that there was the additional weak feature in the fact that there was likely to be large deliveries of refined oil in New York on contracts with the beginning of the month, probably exceeding 10,000 barrels, and that as the demands from consumers are light there was the anticipated oppression from them. Moreover, that it would be an advantage, especially as all other conditions portended weakness for the near future to cover on the part of one or two operators some rather liberal short sales that had been made weeks since of the prime yellow for the May delivery at around $37\frac{1}{2}$ c., and they were then made at that price when spot oil was needed and taken and the May delivery then sold by the buyers of the spot oil.

It would be, as well, quite certain that if

some of the speculative holdings of the prime yellow, those held on Southern account, and which were bought last fall in New York for deliveries around about this time and later months, were let go, upon the New York market that the market would be more thoroughly upset. But despite the considerable trade talk of apprehensions that there may be some selling of this investment oil the fact remains that it has not been shaken out, notwithstanding the considerable decline of the week, and the decided loss from the top prices of the season for refined, which is now about 5c. per gallon.

It seemed to be quite general talk early in the week over the floor of the New York Exchange that the market for the prime yellow would probably get down to 35c., unless the lard market or consumption demand for the cotton oil improved. And this 35c. prognosis was indulged in at the time May was selling at $37\frac{1}{4}$ c. We allude to this with a view only of giving the depressed impressions of the traders even before the May delivery touched 36c., and as they were based upon some of the exhibits of general fat conditions and the dull consumption of cotton oil; although the trade felt that the weak sentiment would disappear if there should come a changed condition of the lard market to give hopes of a better consumption of the oil. It must be well understood by this time that the compound makers' consumption of cotton oil will have to be chiefly relied upon for the season and modified business from the soapmakers, since there is no prospect of material export demand at least in soap grades at around any at present possible prices, while the home soapmakers' consumption of the oil, as necessarily steady in some sources, is on the whole of much more moderate volume than through the previous season and likely to continue so, and because of the full relation of the prices of the oil with those for tallow.

An unsettling feature, as well, for the cotton oil, is the fact that some portion of the oil has latterly gone into store in New York. And this holding of the oil has enlarged that much because of the unwillingness of the sellers to accept the recent reduction of prices for it, and on account, as well, of the feature that because of the narrowed consumption there would necessarily be some pressure if efforts were made to sell the oil. Nevertheless we think that the store holdings of the oil in New York are not as large as some folks suppose they are but are rather moderate. Our idea is that the oil in store amounts to 25,000 to 30,000 barrels in New York.

The fact that the compound makers decline to buy the oil at the lower prices is convincing that they at least see no encouragement in the oil market at its present prices and that they are inclined to take the chances of the future for it; moreover, it is true that as

KENTUCKY REFINING CO.

LOUISVILLE, KENTUCKY, U. S. A.

MANUFACTURERS AND REFINERS
OF ALL GRADES OF

COTTONSEED OIL

"SNOWFLAKE"

A CHOICE WHITE OIL

FOR BAKING, FRYING AND COOKING

Southern Cotton Oil Company

Head Office: 11 Broadway, New York

Cable Address. "Scotoilco," New York.

Mills and Refineries in Georgia, North and South Carolina, Alabama, Tennessee, Arkansas, Louisiana and Texas.

Manufacturers of all Cotton Seed Products

Oil Cake and Meal, Hulls, Linters, Soap Stock and Soap.

Refiners of Cotton Oil, all Grades.

Manufacturers of Lard Compounds.

Refineries Located at Savannah, Augusta and Atlanta, Ga.; Charleston, S. C.; Charlotte, N. C.; Montgomery, Ala.; Houston, Texas; New Orleans, La.; Memphis, Tenn.; and Little Rock, Ark.

they are selling compounds at 6½c., that the price is much closer, necessarily so, than ordinarily to the prices of pure lard, and that even this price offers a much narrower profit than usual considering the cost of cotton oil and oleo stearine.

And, however, many people say that compounds are freely used, notwithstanding how close their selling prices may be to those for pure lard, the fact remains that there is always a much greater business in the compounds when their selling prices are especially attractive against those of pure lard. Unquestionably, however, the compound lard business is, as well, in some degree, now suffering, from the feeling among the distributors of it that the entire fat markets have a distrustful outlook; therefore that it would be poor policy on their part to accumulate supplies largely of the compounds for distribution to consumers.

The buying of peanut oil in Europe by our soapmakers was alluded to in our previous

week's review as reaching 10,000 barrels, where the week before it had amounted to about 6,000 barrels. There are reports this week that the additional buying of this peanut oil will make the amounts to come forward of it from 15,000 to 20,000 barrels. It is hard to get at facts concerning the exact quantity of this peanut oil taken. Absolute information would cover 6,000 barrels of it going to one source of consumption, 4,000 barrels of it to another, and 2,000 barrels more in another quarter; or 12,000 barrels in all. It would, of course, displace the use of cotton oil and tallow by the soapmakers to the extent of it to come forward. But there is no probability of a prompt importation of all the oil that has been bought, or, in other words, that it is likely to come forward by degrees, and thus far it has been only moderately received here.

Efforts are making to ascertain the extent of the unsold holdings of crude over the South. There are various reports and rumors

concerning the volume of the crude oil holdings. After very careful inquiry we think some of the trade impressions had of their magnitude will have to be very much modified. There is nothing, in our opinion, to justify expectations of crude oil supplies over the South beyond 200,000 barrels, and we are inclined to the opinion that they are from 150,000 to 175,000 barrels, probably nearer the latter amount.

The near future of the lard maker is not at all promising for permanently decidedly higher prices, that the prices in it are pushed up spasmodically means little; they as often decline, and the market for the product is left much upon the late order of low figures. It is not a brilliant outlook for lard, although we do not look to see its prices get materially under, in the near future, the late inside trading basis, however, that they will undoubtedly frequently fluctuate. Our line of reasoning about lard has been that the speculation of the public on the "long" side in sev-

THE AMERICAN COTTON OIL CO.

CABLE ADDRESS "AMOTOIL," NEW YORK

COTTONSEED PRODUCTS

OIL, CAKE, MEAL, LINTERS, ASHES, HULLS



GOLD MEDALS
AWARDED
CHICAGO, 1893
PARIS, 1900

AMERICAN COTTON OIL CO.
27 Beaver Street, New York City

GOLD MEDALS
AWARDED
BUFFALO, 1901
CHARLESTON, 1902

**WRITE OR WIRE US FOR
PRICES AND SAMPLES.**



**CABLE ADDRESS—"ARMSTRONG" DALLAS.
CODES—LIEBER, ROBINSON, YOPPS.**

ARMSTRONG

PACKING Co.

**PACKERS - SOAP MAKERS -
COTTON SEED OIL REFINERS.**

DALLAS, TEXAS.

eral commodities has been steadily killed by the upset markets upon it, that it had been worked out of Wall Street afterwards in cotton, coffee, and finally in grain and hog products; therefore that the speculative markets will probably drag for some time, and that the "public," which is essentially always on the bull side on everything, will be missed when the time comes for a disposition to put prices of some products where they, perhaps, belong from statistical considerations, and notably lard, which has, as well, to favor it relatively high cost hogs. There would appear to be reason for expectations of higher lard prices in the late Spring or early Summer months, and as then likely to happen as based upon the loss of productions from the lighter weight of the hogs arriving and the liberal delayed demands to be satisfied. Meanwhile we are not looking for jumping conditions in the lard market, except of a spasmodic order. Moreover when the lard market becomes fully settled there will be a resumption of confidence all around. It has been with some such opinions of the lard market that we had expressed the belief that cotton oil was likely to be better property in the period of better lard market conditions, or late in the season, than intermediately. At the same time from some considerations the prices of lard ought to be materially higher at once, and from the fact that the prices of hogs are only about 25 points lower than the high point for them in February, while lard is fully $1\frac{1}{4}$ c. per pound lower than then; that the packing profit has about disappeared, and that the packers should be concerned in higher prices for the lard since there is no possibility of getting hogs materially cheaper. Moreover, we are not expecting more than ordinary receipts of hogs; the light weights of them imply that also when it is considered that the farmer would be anxious to market the hogs promptly as they come up to marketable condition on the low prices he is compelled to accept for the hogs against the high prices he can realize for corn without feeding it.

The tallow market in New York had one sale for export this week, to Scotland, the first direct export demand in months; and it is more with the possibilities of export demand for tallow that it is not now below $4\frac{1}{2}$ c. for city, hhds., in New York. The soapmakers buy the tallow, in a very conservative way, as influenced by the outlook of the general fat market. Cotton oil, say at 36c. per gallon, is nearly $4\frac{1}{2}$ c. per pound; it will be noticed that it is close to the price of tallow, while cotton oil to have a good, full soapmakers' consumption should be from 3c. to $\frac{1}{2}$ c. per pound under the price of, say, for comparison, city tallow, in hhds., however lower or higher it would be, by comparison, with other grades of tallow.

Where crude oil has been had lower this week it has come about from the changed attitude of the refiners, who now that the demands upon them from consumers are moderate for the refined oil insist upon obtaining the crude oil at the ordinary relation to the prices of the refined at the seaboard, and which prevents the mills, those which wish to sell, maintaining the indifference as con-

cerns prices for the crude they had held before in this season, in selling crude, and as they had had the position in their favor by larger direct demands upon them.

The Hull (Eng.) market is up $1\frac{1}{2}$ d. for week: quoted 19s. $7\frac{1}{2}$ d.

There is no export demand for cotton oil this week, while there are steadily offers of resales on export account of Winter yellow. But, of course, with the sharp decline in this country the foreign markets are not now offering resales of prime yellow.

All of the edible oils were reduced in prices this week in New York.

The sales have been 25 tanks crude in the South-east at 30c.; 28 tanks do, in hhds., at $29\frac{1}{2}$ c. And in New York, sales of 1,000 bbls. prime yellow, March delivery, at 37c.; 400 bbls. do, at $36\frac{1}{4}$ c.; 300 bbls. do, at $36\frac{1}{4}$ c.; 300 bbls. do, at 36c.; afterwards at $35\frac{1}{4}$ c. bid and $35\frac{3}{4}$ c. asked; 750 bbls. do, April delivery, at 37c.; 200 bbls. do, at $36\frac{3}{4}$ c.; 400 bbls. do, at $36\frac{1}{2}$ c.; 500 bbls. do, at $36\frac{1}{4}$ c.; afterwards at $35\frac{1}{4}$ c. on sales of 1,000 bbls., asked; 880 bbls. do, May, at $37\frac{1}{4}$ c.; 3,000 bbls. do, at 37c.; 800 bbls. do, at $36\frac{3}{4}$ c.; 1,800 bbls. do, at $36\frac{1}{4}$ c.; 3,000 bbls. do, 36c., and at this writing at 36c.; 4,750 bbls. do, July, 38c.; 1,800 bbls. do, at $37\frac{1}{4}$ c.; 1,750 bbls. do, at $37\frac{1}{2}$ c.; 500 bbls. do, at $36\frac{3}{4}$ c.; 600 bbls. do, at 37c.; now at $36\frac{3}{4}$ c. with 2,500 bbls. sold at $36\frac{3}{4}$ c.; 100 bbls. do, September, at 37c., now at $36\frac{1}{4}$ c., asked; 200 bbls. do, June, $36\frac{1}{4}$ c.

MANY COTTON OIL MILLS.

The increase of cotton mills in the South is duplicated by the growth of the cottonseed oil mills.

"It is wonderful to record the number of oil mills which have been erected in this state since the construction of cotton mills was begun," said an Alabama man the other day. "Birmingham has two big mills and there is a probability of another. Then in Montgomery, Albertville and several other places in the state mills are up, and in the regular season there is a scramble for the

seed. These oil mills, just like the cotton mills, are a good thing for the cotton grower. Instead of the seed being used for a few things, the by-product is making that part of the crop valuable. The seed is used for oil, the hull for fuel and the meal for fertilizer. Louisiana will have a lot of machinery made in Birmingham for cotton oil mills to be erected before the end of the summer. There are already many mills in Mississippi and more are contemplated."

FLOATING OIL MILLS.

There is a story going the rounds of the press which is more fantastic than credible. It is to the effect that a well-known oil mill engineer has been requested to prepare plans for six mills to be built on barges which will

(Continued on page 38.)

Lombard Iron Works & Supply Company AUGUSTA, GA.

Builders and Dealers in **ENGINES, BOILERS, Tanks, Stacks, Standpipes, etc.; Bridge and Architectural Iron Work; Railroad, Cotton, Saw, Fertilizer, Oil and Ice MACHINERY and Supplies and Repairs; Shafting, Pullers, Hangers, Leather and Rubber Belting and Hose; MILL SUPPLIES and TOOLS; Foundry, Machine, Boiler and Bridge Work. Capacity for 300 hands.**

ASPEGREN & CO.,

Produce Exchange,
NEW YORK,

Commission Merchants

EXPORTERS

Cotton Oil, Tallow
AND GREASES.

The Procter & Gamble Co.

Refiners of All Grades of

COTTONSEED OIL

Aurora, Prime Summer Yellow
Boreas, Prime Winter Yellow
Venus, Prime Summer White

Marigold Cooking Oil
Puritan Salad Oil
Jersey Butter Oil

Cable Address
Procter, Cincinnati, U. S. A.

Office: CINCINNATI, O.
Refinery: IVORYDALE, O.



CHICAGO SECTION



Mr. Rath, of the Rath Packing Co., Waterloo, Ia., was in Chicago recently. This concern is making considerable improvement in its plant.

Nelson Morris and Mrs. Morris are enjoying life in Santa Barbara, Calif., still, as are also several of the Swift family. Quite a number of prominent Chicago people are wintering there nowadays.

Report has it that J. Ogden Armour may purchase the North American Packing Co. property, in which the German-American Provision Co. was located. Armour & Company need the space in their business.

William H. Mallory, chief of the exporting department for Nelson Morris, and also at the head of his ranching properties, who has been suffering from cancer of the throat for two months, is reported to be progressing favorably. Mr. Mallory has been connected with Nelson Morris' interests for thirty-five years, having commenced in the old Myrick yards. He is a man widely known among live stock men throughout the country, all of whom hope for his immediate recovery.

Record has been made of the transfer of the Lipton plant in the stock yards to Jonathan O. Armour for \$250,000, the actual deal having been completed several weeks ago. The consideration named includes the inventory and machinery as well as the real estate and buildings. The real estate involved is 119,497 square feet on Packers avenue, between Forty-third and Forty-fourth streets, surrounded by the Armour and Mo-

ran & Healy plants, and has a value, according to rates established by recent sales, of about \$37,500.

Agents of the Department of Commerce and Labor are at the stock yards looking up evidence to be used at the forthcoming beef investigation. One obstacle to the argument of a combination to reduce cattle prices is the enormous marketing of cattle during the past year. This has created a constant glut, which could not have other than a price-demoralizing effect. Chicago traders have been awaiting a cessation of this liquidation to see if, under the influence of lighter supplies, prices would advance. Failure to do so under such circumstances would afford proof positive of a combination. The course of the market at present is upward, and the seekers after trouble are confounded.

THE INTERNATIONAL MUDDLE.

Two factions of the stockholders in the defunct International Packing Company are at war in the Chicago courts over the remaining assets of the concern. William B. White, Gustav A. Bluhm, A. O. Slaughter and others filed a petition with Judge Dunne which resulted in the appointment of John C. McPherson as receiver for the company's remaining assets. It was alleged that the debenture committee and the directors of the old company had formed a combination by which they were going to sell the idle plant and surrounding property to other packers and pay the money over to those holders who had deposited their debentures with the committee.

Upon receiving his appointment, Mr. McPherson attempted to take charge of the property of the company, including buildings and land at the stockyards, but after two days' effort reported to the court that he was unable to get hold of anything. The complainants thereupon asked that defendants in possession of these assets be cited into court to show cause why they should not be punished for contempt. In the meantime the defendant faction filed noticed of appeal from Judge Dunne's action in appointing a receiver, and the appellate court will be asked to put a stop to the whole movement.

The chief object in securing the appointment of a receiver, according to Attorney Newman, was to prevent "the faction with the upper hand from selling the property and freezing out all the stockholders save those of the clique."

He makes the sensational charge that the directors of the International Packing Company had not done a legitimate business for years. "It was gambling pure and simple," he said. "They squandered the money of the establishment in puts and calls. That is what caused the legitimate business of pork packing, for which the company was organized, to go to the wall."

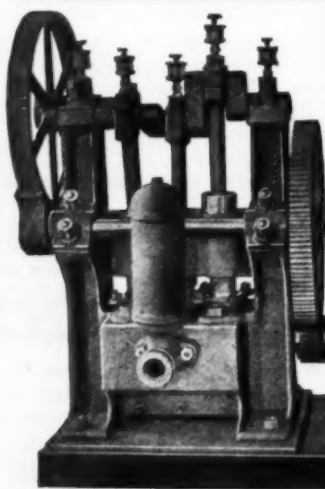
Attorney Newman said that as a result of the speculations there is nothing left but the bare land in the stockyards district with empty, decaying buildings on it. The land is valuable, though, and he says now that a receiver has been appointed, he expects his clients and other stockholders besides the faction he accuses, will get their share of the proceeds from a sale.

ALLBRIGHT-NELL CO.,
4013 Wentworth Avenue - Chicago
WEIR & CRAIG MFG. CO.,
2421 Wallace Street - Chicago
Special Agents Hurford's Hog Hoist



Exclusive agents for Europe and South America.
Brecht Butchers' Supply Co., 46-48 Albertstrasse, Hamburg, Germany.
O. P. Hurford's Hog Hoist!
FOR SMALL PACKERS
337 Rialto Building
CHICAGO, ILL.

Browning Motor attached to pump



BEST of Its Kind.

...From 1 to 50 H. P...

**High Quality.
Right Prices.**

Write for
BULLETIN 36.

The
Browning
Co.,

Milwaukee, Wis.

The International Packing Company was organized in 1896 with a capital stock of \$2,500,000, divided into 25,000 shares of par value of \$100 each. The capital stock was divided into common and preferred shares, 15,000 of which were noncumulative and 10,000 common. The concern ceased business during the latter part of 1900. The bill of complaint says that the company avoided, by hook or crook, making a report to the secretary of state. The bill further says that since the business ceased the property of the company has been held as a trust fund, ostensibly for the sole use and benefit of creditors. An attempt will be made to hold the officers and directors of the defunct company financially responsible for all the losses sustained as a result of the speculations they are said to have made.

PROVISION NOTES.

Beef products steady, with fair demand.

Hog products steady to strong, with fair to good demand.

Cooperage on the fence—buyers and sellers holding widely different views. Pork barrels about \$1.45 and lard tierces \$1.65 last week. Not much doing.

John Cudaby is reported bearish on both provisions and grain.

Estimates point to an increase in pork, lard and ribs—for the month to date, March 19th, of 17,000 barrels, 18,000 tierces and 500,000 pounds ribs.

Receipts for the week ending March 26 are estimated as follows: Cattle, 64,000; hogs, 160,000; sheep, 85,000.

PROVISION LETTER.

(Special Letter to The National Provisioner from C. D. Forsyth & Co.)

Chicago, March 24, 1904.

We quote to-day's market as follows: Green hams, 10@12 ave., nominally 9¼@9½; 12@14 ave., nominally 9½; 14@16 ave., nominally 9½; 18@20 ave., nominally 9½. Green picnics, 5@6 ave., nominally 6½; 6@8 ave., nominally 6½; 8@10 ave., nominally 6½; 10@12 ave., nominally 6½. Green New York shoulders, 10@12 ave., nominally 6½; 12@14 ave., nominally 6½. Green skinned hams, 18@20 ave., nominally 10½@10½. Green clear bellies, 8@10 ave., nominally 10; 10@12 ave., nominally 9½. No. 1 S. P. hams, 8@10 ave., nominally 9½; 10@12 ave., nominally 9½; 12@14 ave., nominally 9½; 14@16 ave., nominally 9½; 16@18 ave., nominally 9½; 18@20 ave., nominally 9½. No. 2 S. P. hams, 10@12 ave., nominally 8½; 12@14 ave., nominally 8½; 14@16 ave., nominally 8½. No. 1

S. skd. hams, 16@18 ave., nominally 9½; 18@20 ave., nominally 9½; 20@22 ave., nominally 9½; 22@24 ave., nominally 9½; 24@26 ave., nominally 9; 25@30 ave., nominally 8½. No. 1 S. P. picnics, 5@6 ave., nominally 6½; 6@8 ave., nominally 6½; 7@9 ave., nominally 6½; 8@10 ave., nominally 6½; 10@12 ave., nominally 6. N. 1 S. P. N. Y. shoulders, 8@10 ave., nominally 6½; 10@12 ave., nominally 6½. S. P. clear bellies, 8@10 ave., nominally 9½; 10@12 ave., nominally 9½. Family back pork, 30@40 piece, \$14; 40@50 piece, \$14.25; 50@60 piece, \$14.50; Boston butt pork, \$13; ham butt pork, \$12.50; bean pork, \$10.50.

CHICAGO PROVISION MARKET

RANGE OF PRICES.

SATURDAY, MARCH 19, 1904.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	6.82	6.97	6.82	6.92
July	7.00	7.15	7.00	7.10
RIBS—(Boxed 25c. more than loose)—				
May	6.70	6.82	6.70	6.80
July	6.85	6.95	6.85	6.92
PORK—(Per barrel)—				
May	13.15	13.30	13.07	13.12
July	13.40	13.50	13.27	13.35

MONDAY, MARCH 21, 1904.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	6.97	6.97	6.85	6.92
July	7.10	7.12	7.00	7.10
RIBS—(Boxed 25c. more than loose)—				
May	6.77	6.82	6.65	6.77
July	6.92	6.95	6.80	6.90
PORK—(Per barrel)—				
May	13.20	13.22	12.87	13.10
July	13.40	13.45	13.10	13.30

TUESDAY, MARCH 22, 1904.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	7.00	7.05	6.95	6.97
July	7.15	7.20	7.12	7.12
RIBS—(Boxed 25c. more than loose)—				
May	6.85	6.87	6.80	6.80
July	7.00	7.02	6.95	6.95
PORK—(Per barrel)—				
May	13.50	13.50	13.05	13.05
July	13.40	13.50	13.25	13.25

WEDNESDAY, MARCH 23, 1904.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	6.92	6.92	6.85	6.90
July	7.10	7.20	6.97	7.05
RIBS—(Boxed 25c. more than loose)—				
May	6.80	6.80	6.67	6.75
July	6.92	6.92	6.82	6.90
PORK—(Per barrel)—				
May	13.07	13.07	12.75	12.92
July	13.25	13.27	12.95	13.12

THURSDAY, MARCH 24, 1904.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	6.95	6.97	6.92	6.97
July	7.07	7.12	7.07	7.10
RIBS—(Boxed 25c. more than loose)—				
May	6.80	6.85	6.77	6.82
July	6.92	7.00	6.92	6.97
PORK—(Per barrel)—				
May	12.97	13.10	12.95	13.05
July	13.20	13.30	13.17	13.27

FRIDAY, MARCH 24.

	Open.	High.	Low.	Close.
PORK—				
May	13.00	13.22	13.00	13.07
July	13.22	13.42	13.22	13.30
LARD—				
May	6.97	7.07	6.97	7.00
July	7.12	7.22	7.12	7.15
RIBS—				
May	6.85	6.95	6.85	6.90
July	7.00	7.10	6.97	7.05

LIVE STOCK NOTES.

Top price for hogs in 1903.....	\$7.50
In 1902	7.80
Average cost of hogs week March 19...	5.36
Previous week	5.45
A year ago	7.35
Two years ago	6.41
Three years ago	5.70
Four years ago	5.00
Five years ago	3.80
Good cattle sold last week at.....	5.80
Previous week	6.00
One year ago	5.70
Two years ago	7.35
Three years ago	6.00
Four years ago	5.60

Armour & Co received 2,000 hogs direct from Sioux City.

Cincinnati bought quite a few hogs in Chicago during the week.

On the strength of a prospective light hog movement provision men look for a substantial advance.

There is a dearth of really good mature beef cattle, but a good supply of fair appearing poorly-finished heaves.

The breaking up of the roads from now on, together with farming operations, will no doubt result in erratic receipts of live stock.

The shipping demand has been of late of such volume as to become the feature of the trade.

FROM OJIBWAY TO KOREA.

The FOUR-TRACK NEWS for April opens with a timely article on Korea, entitled "With the Hermits," from the pen of Kirk Munroe; "Where Sheridan Was a Boy," by Clement L. Martzoff, is an interesting pen-picture of the early life of "Fighting Phil"; "Charming Chautauqua" is a prettily written description of that lake and its surroundings, by Will Larrymore Smedley; "Snow Caps," by Day Allen Willey, is a brief article on mountain climbing in the Canadian Rockies; Laura B. Starr tells something of the life on houseboats in different parts of the world; "The Tunneled Rock of Perce," is an intensely interesting sketch of life among the fisher-folk of Chaleur; Isabel R. Wallach contributes an article on "The Metropolitan Museum," and Martha Lowell tells something of the "Byways of Japan"; "Back of the Backwoods," by Charles Howard Shinn, treats of the life of the Indians of the Sierra Nevada; "Ojibway Land," by Martha Craig, is a picture of Indian life on Temiskaming; "After Ducks in Mexico," by Leland Howard Ives, is an article to delight the reader who enjoys hunting; S. M. McCowan tells of the American Indian exhibit at the St. Louis Fair, and N. S. Olds writes of the battle of Lundy's Lane; Jane W. Guthrie devotes two pages to the coming Cincinnati musical festival, and H. Perry Smith tells of "Champlain's Two Expeditions." In addition to these articles there are the usual departments, full of interesting and valuable facts, several "Little Histories," together with poetry and humor rounding out a very complete Table of Contents.

The FOUR-TRACK NEWS is fifty cents a year, or five cents a copy, and can be had of George H. Daniels, Publisher 7 East 42d street, New York.

If, and when, you need anything in SUPPLIES, drop us a line and we'll submit figures

WE ARE HEADQUARTERS ON SALT (WE MINE IT)

Woodenware, Packages, Cordage, Skewers, Wax and Parchment Paper, Etc.

FRED. K. HIGBIE COMPANY, 36 So. Water, Chicago

CHICAGO HOG SLAUGHTER.

Chicago packers slaughtered hogs during the week ending March 19, 1904, as follows:

Armour & Co.	23,000
Anglo-American	7,700
Continental	2,600
Swift & Co.	19,900
G. H. Hammond Co.	2,900
Nelson Morris & Co.	8,500
Boyd & Lunham	2,200
S. & S.	6,400
H. Boone & Co.	1,100
Roberts & Oake	2,000
Other packers and city butchers	19,100

Making total of	95,400
Previous week	91,800
A year ago	80,900
Two years ago	134,000
Three years ago	97,900

CHICAGO LIVE STOCK.

STOCK YARD RECEIPTS AND SHIPMENTS.

Receipts.	Cattle.	Calves.	Hogs.	Sheep.
Monday, March 14	24,976	477	41,681	22,087
Tuesday, March 15	2,022	1,574	11,687	11,966
Wednesday, March 16	22,610	900	29,906	22,814
Thursday, March 17	6,313	823	29,912	21,131
Friday, March 18	1,742	163	21,953	5,544
Saturday, March 19	300		10,000	3,000

Totals	57,063	3,837	145,139	86,572
Previous week	57,549	3,900	122,842	79,908
Cor. week 1903	55,802	4,264	133,538	64,491
Cor. week 1902	53,421	3,846	106,643	64,064

Shipments—	Cattle.	Calves.	Hogs.	Sheep.
Saturday, March 12	485	57	4,564	5,843
Monday, March 14	8,215		12,528	6,843
Tuesday, March 15	2,906	14	7,553	2,038
Wednesday, March 16	5,824	48	11,955	6,883
Thursday, March 17	6,890	18	12,856	5,057
Friday, March 18	2,317	27	9,071	4,298
Saturday, March 19	400	50	6,000	2,000
Totals	26,549	154	59,983	27,217
Previous week	27,392	196	47,312	21,365
Cor. week 1903	20,795	154	36,340	11,119
Cor. week 1902	17,155	197	47,891	13,137

CATTLE.

Choice to fancy heaves	\$5.55@5.85
Good to choice heavy steers	5.10@5.50
Fair to good export and shipping steers	4.60@5.00
Medium beef steers	4.10@4.50
Inferior and plain steers	3.50@4.00
Good to fancy cows and heifers	3.90@4.65
Good to choice feeders	3.70@4.50
Poor to fair stockers and feeders	2.35@3.60
Fair to good cows and heifers	2.90@3.75
Good cutting and fair beef cows	2.60@3.10
Common to good culling cows	1.65@2.50
Bulls, poor to choice	1.75@4.00
Calves, good to fancy	5.25@6.25
Calves, common to fair	2.75@5.00
Corn-fed western steers	4.10@5.40
Texas bulls and thin steers	2.25@3.70
Fed Texas steers, fair to choice	3.30@4.50

HOGS.

Good to choice heavy shipping	\$5.35@5.45
Fair to good butcher weights	5.25@5.42½
Fair to good heavy packing	5.10@5.30
Rough to choice heavy mixed	5.10@5.35
Assorted light, 150 to 180 lbs.	5.05@5.25
Fair to good light mixed	5.10@5.35
Inferior light mixed	4.85@5.00
Poor to choice 60 to 135 lb. pigs	4.25@4.80

SHEEP.

Fair to prime wethers	\$4.75@5.25
Fair to good mixed lots	4.00@4.75
Fair to fancy western wethers	4.75@5.20
Fair to prime yearlings	4.70@5.25
Ewes, fair to fancy	3.75@5.00
Plain to good feeding stock	3.70@4.00
Culls and tail-end stock	2.50@3.40
Native lambs, poor to fair	3.50@5.00
Native lambs, good to fancy	5.20@5.75
Fat western and Mexican lambs	5.25@5.90
Western feeding lambs, poor to choice	4.50@5.10

COTTONSEED OIL.

(Continued from page 35.)

be placed on various Southern rivers. It is claimed that the promoters of this scheme have plenty of money, and they believe they have hit upon a very good thing. They contend that it is entirely feasible to build a 20-ton oil mill on a barge which will allow it to be moved from point to point along the river. A writer in a Southern trade paper is of the opinion that these floating mills would meet with some strenuous competition, as there is hardly a river which would float a barge without several small steamboats plying it. Nearly every river town of any prominence has an oil mill, and these mills depend largely on the seed from the territory lying along the river. There may be some desirable locations for these floating mills, but a close inspection of the map of the cotton belt fails to show any river territory which is very far removed from some established oil mill.

COTTONSEED OIL SITUATION.

(Special Letter to The National Provisioner from Aspegren & Co.)

As pointed out in our last week's market letter, there has been just as many bull arguments as bear arguments all through the season, and never before has opinion been so divided in regard to the final outcome of the situation. Looking at the question of supply, there is hardly anything but bull arguments and looking at the question of demand, we find mostly bear arguments.

Early in the season, before the government cotton crop report came out, the traders generally were apt to consider only the question of demand, which was a very slack one, and prices declined somewhat. As soon as the government cotton crop report came out, however, with an estimate of a crop of less than 10,000,000 bales, the traders forgot all about the question of demand, looking simply at the question of supply, which certainly was bullish, and up the prices went. Then came the break in cotton and the failure of Sully & Co., which made traders more cautious when it came to bull operations, and they started to scrutinize the question of demand, which was just as bearish as before, and as sentiment changed, selling started and prices tumbled down again on account of the absence of demand.

In determining the future course of the market, it is absolutely necessary to look at both the question of demand and supply, but this season fluctuations have taken place, and the advance has been succeeded by a decline.

That the advance to 41c. for refined oil was

a speculative one, seems, by this time, to be a pretty well known fact, and that the advance was carried a little too far, seems to be proven by the heavy slump which has taken place within the last few weeks.

Just now the market looks very weak, with traders looking only at the question of demand, and finding same just as poor as before, they keep on hammering the market. But how about the question of supply? It must not be forgotten that the movement of the cotton crop this year is smaller than last year and considerable oil will have to be crushed yet in order to make up for the deficiency. Of course, it remains to be seen how long a crushing season we will have. Should the receipts of seed continue on the same basis as before, we would advise caution, as a sudden turn in the market is not improbable. As we have stated, however, there is nothing just now in view to warrant any change. This season, however, is such an unusual one that sudden changes can easily take place when they are at the least expected.

We quote to-day as follows:

Prime summer yellow cottonseed oil, April, 35½c. sales; do., May, 36c. sales; do., June, 36½c. sales; do., July, 37c. sales; do., August, 37c. sales; do., September, 36c. sales; do., October, 35c. sales; do., November, 34c. sales; do., December, 33½c. sales; prime winter yellow cottonseed oil, 38c. sales; prime summer white cottonseed oil, 38c. sales; Hull quotation of cottonseed oil, 19s. 7½d.; prime oil in tanks in the Southeast, 29c. sales; prime crude oil in tanks in Mississippi Valley, 29c. sales; prime crude oil in tanks in Texas, 28c. sales.

BUTTER MAKERS AND DYES.

The Minnesota butter-makers are in danger of being tarred with the brush wherewith they have been trying to daub oleo makers. State Dairy and Food Commissioner McConnell is after them for using vegetable coloring in their butter, which it is claimed is poisonous. The department has begun a special investigation to determine the effects of vegetable colorings on butter, and has sent to Chicago, for analysis by butter experts in the service of the United States Department of Agriculture, samples of butter containing vegetable colorings and also samples containing coal tar and aniline dyes. Commissioner McConnell is satisfied that colorings containing coal tar and aniline dyes are injurious to health, and he is trying to find a harmless vegetable coloring to take the place of the coal tar.

AMERICAN PLANT FOR BUENOS AYRES.

According to a consular report from Argentina, Alberto de Permentier, of Buenos Ayres, who has charge of the construction and equipment of a large pressed meat factory in the capital of the Argentine Republic, is about to place contracts for considerable American machinery, including meat extracting plant, machinery for making tins, refrigerating plant, filtration systems, air compressors, ventilators, dryers, steam power plant, including engines, boilers, fuel and economizers, condensers, etc., pumps, hydraulic presses, rendering plants and steam cookers; also equipment for abattoirs, machine shop, iron and brass foundry, cooperage and carpenter shops, including metal roofing, hoists, cranes, trucks, car rails, etc.

THE DAVIES WARE-HOUSE & SUPPLY CO.

Office: 20 N. Clark St.
on C. & N. W. R. R. } CHICAGO
Warehouse: 161 N. Water St.

Tools, Scoops & Shovels.

Manufacturers and
Dealers in all kinds of
Packing House Supplies.

ALL IRON TANK
COCKS, D & D Pattern
x x x
HAM and LIVER
NEEDLES

x x x
BRASS and IRON
GOODS.

MARKET PRICES.

CHICAGO.

FERTILIZERS.

Dried blood, per unit.....	@ 2.25
Hoof meal, per unit.....	@ 2.00
Concent. tank, 15 to 185 per unit.....	@ 2.10
Ground tank, 10 to 115 per unit.....	2.10 @ 10c.
Unground tank, 10 to 115 per unit.....	2.00 @ 10c.
Unground tank, 9 and 30%, ton.....	20.00
Unground tank, 6 and 35%, ton.....	14.00
Ground raw bone, per ton.....	20.00
Ground steam bone, per ton.....	17.50

HORNS, HOOFS AND BONES.

Horns, No. 1, 65 to 70 lb., avg. ton.....	\$20.00
Horns, black, per ton.....	22.50
Horns, striped, per ton.....	20.00
Horns, white, per ton.....	43.00
Round Shin Bones, 35 to 40 lb., avg. ton.....	43.00
Round Shin Bones, 50 to 52 lb., avg. ton.....	38.00
Long Thigh Bones, 90 to 95 lb., avg. ton.....	33.00

LARDS.

Choice prime steam.....	@ 6.75
Prime steam.....	7 1/4 @ 7 1/4
Neutral.....	6 1/4 @ 6 1/4
Compound.....	6 1/4 @ 6 1/4

STEARINES.

Oleo.....	6 1/4 @ 7 1/4
Lard.....	7 1/4 @ 7 1/4
Grease, W.....	4 1/2 @ 5
Grease, B.....	4 1/2 @ 5 1/4
Grease, Y.....	4 1/2 @ 4 1/2

OILS.

Lard Oil, extra winter strained tes.....	.60
Lard Oil, extra, No. 1.....	.30
Lard Oil, No. 1.....	.34
Lard Oil, No. 2.....	.32
Oleo Oil, extra.....	7 1/4 @ 7 1/4
Oleo Oil No. 2.....	7 1/4 @ 7 1/4
Neatsfoot Oil, pure.....	.68 @ .70
Neatsfoot Oil, No. 1.....	.63 @ .65

TALLOW.

Packers' prime.....	5 1/2 @ 5 1/4
No. 2.....	4 @ 4 1/2
Edible.....	4 1/2 @ 4 1/2
City renderers.....	4 1/2 @ 5

GREASE.

Brown.....	3 1/4 @ 4 1/2
Yellow.....	3 1/4 @ 4
White, A.....	4 1/2 @ 5
Bone.....	4 @ 4 1/4

CURING MATERIALS.

Refined saltpetre.....	4 1/4 @ 5 1/4
Boracic acid, crystal to powdered.....	10 1/4 @ 11 1/4
Borax.....	7 1/2 @ 8
Sugar—	
Pure, open kettle.....	3 1/4
White, clarified.....	4
Plantation, granulated.....	4 1/2
Yellow, clarified.....	4
Salt—	
Ashion, in bags, 224 lb.....	\$2.35
Eng. packing, in bags, 224 lb.....	1.45
Michigan, medium, car lots, per ton.....	3.00
Michigan, granulated, car lots, per ton.....	2.50
Casing salt, bbls., 280 lb., 2X and 3X.....	1.00

COOPERAGE.

Tierces.....	@ 1.65
Barrels, Oak.....	@ 1.45
Ash.....	@ 1.25

BUTCHERS' WHOLESALE PRICE LIST.

CORNED, BOILED AND ROAST BEEF.

1 lb., 2 doz. to case.....	Per doz. \$1.30
2 lb., 1 or 2 doz. to case.....	2.40
1 lb., 1 doz. to case.....	4.85
6 lb., 1 doz. to case.....	8.00
1 lb., 14 doz. to case.....	18.00

EXTRACT OF BEEF.

1 oz. jars 1 dozen in box.....	Per doz. \$2.25
2 oz. jars 1 dozen in box.....	3.55
4 oz. jars 1 dozen in box.....	6.50
8 oz. jars 1/2 dozen in box.....	11.00
6 oz. jars 1/4 dozen in box.....	22.00
2, 5 and 10 lb. tins.....	\$1.75 per lb.

BARRELED BEEF AND PORK.

Extra plate beef.....	\$10.00
Plate beef.....	9.50
Extra mess beef.....	9.50
Prime mess beef.....	10.00
Beef hams.....	
Rump butts.....	9.50
Mess pork, repacked.....	13.87 1/2
Extra clear pork, Long Cut.....	15.75

DRIED BEEF PACKED.

Ham sets.....	12 1/4
Insides.....	14
Outsides.....	11 1/4
Knuckles.....	13
Reg. cloids.....	10

SMOKED MEATS PACKED.

A. C. Hams.....	12 1/4
Skinned Hams.....	12 1/4
Shoulders.....	8 1/2
Picnics.....	8 1/2
Breakfast Bacon.....	15 1/4

LARD.

Pure leaf, kettle rendered, per lb. tes.....	8 1/4
Lard substitute, tes.....	7 1/2
Lard compound.....	7 1/2
Barrels.....	1/4c. over tes.
Half barrels.....	1/4c. over tes.
Tubs, from 10 to 80 lb.....	1/4c. to 1c. over tes.

BUTTERINE.

F. O. B. CHICAGO.

No. 1, natural color.....	@ 10
No. 2.....	@ 11 1/4
No. 3.....	@ 12
No. 4.....	@ 13
No. 5.....	@ 14
No. 6.....	@ 15

BOILED MEATS.

Hams, boneless.....	18 1/4
California, boneless.....	10 1/4
Roiled shoulders.....	10 1/4

DRY SALT MEATS.

Rib bellies.....	8.17 1/2
Short clears.....	
Plates, regular.....	6.00
American shoulders.....	

SAUSAGE CASINGS.

Beef round, set of 100 ft.....	12
Beef middles, set of 57 ft.....	35
Beef bungs, each.....	7
Hog casings, per lb free of salt.....	
Hog bungs, exports.....	
" medium, each.....	
" small, each.....	
Sheep casings, per bundle.....	

SAUSAGES.

Summer, H. C.....	16
German Salami.....	15
Holsteiner.....	11
O'Arise H. C.....	18
Italian Salami.....	18
Cervelat.....	13
Bologna.....	13
Frankfurts.....	5 1/4
Blood, Liver and Head Cheese.....	7 1/2
Tongue.....	9
Special Compressed Ham.....	8
Berliner Ham.....	8
Polish Ham.....	7
Veal Ham.....	7
Pork Sausage.....	7 @ 8

VINEGAR PICKLE—COOKED MEATS.

Pigs' Feet, 1/4 bbl., 80 lb.....	\$3.00
Snouts, 1/4 bbl., 80 lb.....	5.20
Ox Hearts, 1/4 bbl., 80 lb.....	5.30
Plain Tripe, 1/4 bbl., 80 lb.....	2.40
H. C. Tripe, 1/4 bbl., 80 lb.....	4.50

DRESSED BEEF.

	Carcass.	Forcs.	Hinds
Fair Cows.....	6 1/4	5	7 1/4
Good Young Cows.....	7	5 1/4	8 1/4
Native Heifers.....	7 1/4 @ 8	6	9 1/4
Texas Steers.....	7 @ 7 1/4	5 1/4	9
Western Steers.....	7 1/4 @ 8	6 1/4	10
Native Steers.....	7 1/4 @ 8 1/4	6 1/4	11

BEEF CUTS.

	No. 1.	No. 2.	No. 3.
Loins.....	14	13 1/4	6 1/4
Short Loins.....	20	18	12
Ribs.....	12 1/4	10	6 1/4
Tenderloins.....	20		18
Chucks.....	6	5 1/4	4 1/4
Plates.....	4 1/4	4 1/4	3 1/4
Brands.....	7 1/4	6 1/4	5
Rolls, boneless.....			9 @ 10
Shoulder Clods, boneless.....			6 @ 7
Rump Butts, boneless.....			6 1/4
Chucks, boneless.....			4 1/4
Strip Loins (reg.).....			6 1/4
Beef Ham Sets.....			8 1/4

BEEF SUNDRIES.

Cheek meat.....	4
Hanging Tenderloins.....	6 1/4
Flank Steak.....	7 @ 9
Trimnings.....	4
Shanks.....	3 1/4
Flanks (rough).....	5
Brains.....	4
Kidneys.....	4
Beef Suet.....	25
Sweetbreads.....	25
Oxtails.....	3 1/4
Livers.....	4
Hearts.....	3
Tongues.....	11 1/4
Clean Tripe (reg.).....	2 1/4
Clean Tripe (H. C.).....	4

CALVES.

Carcass.....	7 @ 10
Forcs.....	5 @ 8
Hinds.....	9 @ 12
Sweetbreads.....	45c.
Livers.....	30c.

MUTTON.

Lambs (carcass).....	11 @ 12
Ewes (carcass).....	7 @ 8
Yearlings (carcass).....	9 @ 10
Wethers (carcass).....	8 @ 9
Mutton (racks).....	6 @ 7
Mutton, legs.....	@ 11
Mutton, breasts.....	@ 5 1/4
Mutton, stews.....	@ 5 1/4
Lamb (racks).....	9 @ 10
Lamb, loins.....	@ 16
Lamb, saddles.....	@ 16
Lamb, legs.....	@ 16
Lamb, tongue.....	12c. per lb.
Lamb, fries.....	5c. pair

PORK.

Dressed Hogs.....	7 1/4
Tenderloins.....	17 1/4
Pork Loins.....	9 1/4 @ 9 1/2
Spare Ribs.....	7 @ 7 1/4
Butts.....	7 1/4
Shoulders.....	7 1/4
Shoulders (skinned).....	7
Trimnings.....	6 1/4
Pigs' Tails.....	3 1/4
Hearts (per pound).....	2
Leaf Lard.....	6 1/4
Heads (rough).....	3 1/4
Heads (cleaned).....	3 1/4
Hocks.....	3 1/4
Cheek Meat.....	3 1/4
Neck Bones.....	1 1/4
Backfat.....	6 1/4
Plox (per lb).....	3
Kidneys (per lb).....	2
Pigs' Feet (rough).....	2
Pigs' Feet (cleaned).....	2 1/4
Brains (per lb).....	3
Snouts and Ears.....	3
Tongues.....	10

BUTCHERS' OFFAL.

Tallow.....	3c.
Mixed Bone and Tallow.....	2 1/4 per lb.
Calfskins, 8 to 15 lb.....	11c.
Calfskins, under 8 lb.....	60c. each

NEW YORK CITY

QUOTATIONS FOR BEEVES.

Good to choice native steers.....	\$5.15 @ \$5.50
Medium to fair native steers.....	4.30 @ 5.10
Poor to ordinary native steers.....	3.75 @ 4.20
Oxen and stags.....	2.75 @ 5.00
Bulls and dry cows.....	1.50 @ 4.25
Good to choice native steers one year ago.....	5.30 @ 5.55

LIVE CALVES.

Live veal calves, a few selected.....	100 lb 7 3/4 @ 8 1/4
Live veal calves, good to prime.....	100 lb 7 @ 8

LIVE HOGS.

Hogs, heavy weights (per 100 lbs.).....	6.00 @ 6.10
Hogs, medium.....	6.10 @ 6.30
Hogs, light to medium.....	6.20 @ 6.35
Pigs.....	6.30 @ 6.40
Roughs.....	5.00 @ 5.40

LIVE SHEEP AND LAMBS.

Spring lambs, selected.....	per lb 6 1/4
Spring lambs, good to choice.....	per lb 6 3/4
Spring lambs, culls.....	6
Sheep, selected.....	per 100 lb 5 1/4
Sheep, medium to good.....	per 100 lb 5
Sheep, culls.....	per 100 lb 4

DRESSED BEEF.

CITY DRESSED.

Choice native, heavy.....	8 1/4 @ 8 3/4
Choice native, light.....	7 3/4 @ 8 1/4
Common to fair, native.....	6 3/4 @ 7 3/4

WESTERN DRESSED BEEF.

Choice native, heavy.....	7 1/4 @ 7 3/4
Choice native, light.....	7 @ 7 1/4
Native, com. to fair.....	6 3/4 @ 6 1/2
Choice Western, heavy.....	6 1/4 @ 6 1/2
Choice Western, light.....	6 @ 6 1/4
Common to fair, Texan.....	5 @ 5 1/4
Good to choice heavy.....	6 1/4 @ 6 3/4
Common to fair hangers.....	5 1/4 @ 6
Choice cows.....	6 @ 6 1/4
Common to fair cows.....	4 1/2 @ 5 1/4
Good to choice oxen and stags.....	6 @ 6 1/4
Common to fair oxen and stags.....	5 @ 5 1/4
Fleshy Bologna bulls.....	5 @ 5 1/4
Fresh pork loins, Western.....	10 @ 11 1/4

DRESSED CALVES.

Veals, city dressed, prime, per lb.....	8 @ 11 1/4
Veals, good to choice, per lb.....	7 3/4 @ 12 1/4
Calves, country dressed, prime, per lb.....	9 @ 11
Calves, country dressed, fair to good.....	7 @ 9
Calves, country dressed, common.....	6 @ 7

DRESSED HOGS.

Pigs.....	8 1/4 @ 8 1/2
Hogs, heavy.....	7 1/4 @ 7 3/4
Hogs, 185 lb.....	7 1/4 @ 7 3/4
Hogs, 190 lb.....	7 1/4 @ 7 3/4
Hogs, 140 lb.....	7 1/4 @ 7 3/4

DRESSED SHEEP AND LAMBS.

Spring Lambs, choice.....	per lb @ 10
Spring Lambs, good.....	@ 9 1/4
Spring Lambs, culls.....	@ 9
Sheep, choice.....	@ 7 1/4
Sheep, medium to good.....	@ 7
Sheep, culls.....	@ 6

PROVISIONS.

(Jobbing Trade)

Smoked hams, 10 lb average.....	@ 12 1/4
Smoked hams, 12 to 14 lb average.....	@ 12 1/4
Smoked hams, heavy.....	@ 11 1/4
California hams, smoked, light.....	@ 8
California hams, smoked, heavy.....	@ 8
Smoked bacon, boneless.....	@ 13
Smoked bacon (rib in).....	@ 12
Dried beef sets.....	@ 13
Smoked beef tongues, per lb.....	@ 14
Smoked shoulders.....	@ 7 1/4
Pinked bellies, heavy.....	@ 7 3/4

BONES, HOOF, HAIR AND HORNS.

Round shin bones, av. 50-60 lb cut, per 100 bones.....	\$55.00
Flat shin bones, av. 40-45 lb cut, per 100 bones.....	40.00
Thigh bones, av. 90-95 lb cut, per 100 bones.....	75.00
Horns.....	15.00
Horns, 7 1/2 oz. and over, steers, first quality.....	270 @ 280

BUTCHERS' SUNDRIES.

Fresh steer tongues.....	50c to 75c a piece
Fresh Cow Tongues.....	35c to 50c a piece
Calves' head, scalded.....	25c to 40c a piece
Sweet breads, veal.....	25c to 75c a pair
Sweet breads, beef.....	10c to 18c a lb
Calves' liver.....	25c to 50c a piece
Beef kidneys.....	7c to 12c a piece
Mutton kidneys.....	1 1/4c to 2 1/4c a piece
Livers, beef.....	4c to 5c a lb
Oxtails, beef.....	5c to 7c a piece
Hearts, beef.....	10c to 15c a piece
Rolls, beef.....	10c to 12c a lb
Tenderloin, beef, Western.....	15c to 25c a lb
Lambe' fries.....	6c to 10c a pair
Fresh pork loins, city.....	11 1/4 @ 12
Fresh pork loins, Western.....	10 1/4 @ 11

BUTCHERS' FAT.

Ordinary shop fat.....	@ 2 1/4
Suet, fresh and heavy.....	@ 4
Shop bones, per cwt.....	@ 25

PICKLED SHEEPSKINS.

XXX sheep, per dozen.....	@ \$5.75
XX sheep, per dozen.....	@ 4.50
X sheep, per dozen.....	@ 3.75
Blind Ribby sheep.....	@ 3.75
Sheep, ribby.....	@ 3.12 1/2
XX lambs, per dozen.....	@ 4.50
X lambs, per dozen.....	@ 3.50
No. 1 lambs, per dozen.....	@ 3.00
No. 2 lambs, per dozen.....	@ 2.00
Culls, lambs.....	@ 75

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	80
Sheep, imp., wide, per keg, 50 bundles.....	\$40.00
Sheep, imp., medium, per bundle.....	60
Sheep, imp., per bundle, narrow.....	44
Sheep, imp., Russian Rings.....	42
Hog, American, in tcs. or bbls., per lb.....	42
Hog, American, kegs, per lb.....	42
Beef, rounds, per set, f. o. b. Chicago.....	12
Beef, rounds, per set, f. o. b. N. Y.....	13
Beef, rounds, per lb.....	2
Beef, bungs, piece, f. o. b. N. Y.....	8
Beef, bungs, per lb.....	5
Beef, middles, per set, f. o. b. Chicago.....	35
Beef, middles, per set, f. o. b. N. Y.....	37
Beef, middles, per lb.....	@ 8 1/4
Beef wassands, per 1,000, No. 1's.....	@ 5
Beef wassands, per 1,000, No. 2's.....	2 1/4 @ 3

SPICES.

	Whole.	Ground
Pepper, Sing., white.....	21 1/4	22 1/4
Pepper, Sing., black.....	14	15
Pepper, Penang, white.....	21	22
Pepper, red, Zanzibar.....	19	21
Pepper, shot.....	15	15
Allspice.....	05 1/4	12
Coriander.....	06	07
Cloves.....	20	22
Mace.....	35	40

SALTPETRE.

Crude.....	3 1/4 @ 3 3/4
Refined—Granulated.....	4 1/4 @ 4 1/4
Crystals.....	4 1/4 @ 5 1/4
Powdered.....	4 1/4 @ 4 1/4

THE GLUE MARKET.

A extra.....	21
I extra.....	17
.....	16
IX moulding.....	15
.....	14 1/4
.....	14
.....	13
.....	12
.....	11
.....	10
.....	9
.....	9

GREEN CALFSKINS.

No. 1 calfskins.....	per lb .14
No. 1 calfskins, buttermilk.....	.12
No. 2 calfskins, 12-14.....	each 1.50
No. 2 calfskins, buttermilk.....	.10
No. 2 calfskins, 12 1/4-14 lb.....	piece 1.30
No. 1 grassers.....	per lb .12
No. 2 grassers.....	per lb .09

No. 1 heavy kips, 18 lb and up.....	piece 1.90
Ticky kips, 18 lb and up.....	piece 1.40
No. 2 heavy kips, 18 lb and up.....	piece 1.85
No. 1 kips, 14-18 lb.....	piece 1.70
No. 2 kips, 14-18 lb.....	piece 1.50
No. 1 grass kips.....	piece 1.50
No. 2 grass kips.....	piece 1.25
Ticky kips.....	piece 1.00
Branded heavy kips.....	piece 1.10
Branded kips.....	piece .90
Branded skins.....	piece .50

GAME.

DRY-PACKED.

Snipe, English, per dozen.....	1.75 @ 2.00
Plover, Golden, p-r dozen.....	2.50 @ 3.00
Grass, per dozen.....	1.75 @ 2.00

DRESSED POULTRY.

FRESH KILLED.

Turkeys—West'n, young hens, selected.....	@ 18
W'n, young toms, medium weights, selected.....	17 1/2 @ 18
W'n, young toms, heavy weights.....	@ 17
W'n, young hens & toms, selected.....	@ 18
Western, mixed, fair to prime.....	15 @ 17
Old hens.....	13 @ 15 1/4
Common.....	12 @ 14
Capons—Philadelphia, large.....	22 @ 23
Philadelphia, medium weights.....	13 @ 20
Ohio and Indiana, large.....	@ 18
Mixed.....	15 @ 17
Small and 3-lbs.....	13 @ 14
Broilers, Phila., 4 lb. and under to pair, fancy.....	@ 25
Pha., 4 lb. and under to pair, fancy.....	@ 25
Western, dry-picked, 4 lb. and under to pair, fancy.....	@ 25
Chicken—Phila., fcy, large, per lb.....	@ 19
Phila., mixed sizes, per lb.....	@ 17
State and Pa., fancy, per lb.....	@ 16
State and Pa., med. sizes, per lb.....	@ 13
State and Pa., poor, per lb.....	@ 11
Western, dry-picked, large, per lb.....	@ 14 1/4
Western, scalded, large, per lb.....	@ 14 1/4
Western, dry-picked and scalded, medium sizes.....	12 1/4 @ 13 1/4
Fowls—Ohio & Mich., scalded, per lb.....	14 1/4 @ 15
Western, inferior.....	@ 11 1/4
Squabs—Prime, large, white, per doz.....	3.00 @ 3.25
Mixer, per doz.....	2.50 @ 2.75
Dark, per doz.....	1.75 @ 2.00
Fowls and chickens, poor, per lb.....	@ 12
Old cocks, per lb.....	@ 10

LIVE POULTRY.

Spring chickens, nearby, per lb.....	12 @ 14 1/4
Fowls, per lb.....	@ 14 1/4
Roosters, per lb.....	8 1/4 @ 9
Turkeys, per lb.....	@ 15
Ducks, average, Western, per pair.....	80 @ 90
Geese, Western, per pair.....	1.00 @ 1.25
Live Pigeons, per pair.....	@ 35

FERTILIZER MARKETS.

BASIS, NEW YORK DELIVERY.

Bone meal, steamed, per ton.....	\$23.00
Bone meal, raw, per ton.....	\$25.50
Nitrate of soda—future.....	2.05 @ 2.07 1/4
Nitrate of soda—spot.....	2.15 @ 2.25
Bone black, spot, per ton.....	15.50 @ 16
Dried blood, N. Y., 12-13 per cent. ammonia.....	2.55 @ 2.80
Dried blood, West, high grade, fine ground, c. f., N. Y.....	2.55 @ 2.90
Tankage, 9 and 20 p. c., f. o. b. Chicago.....	22.00 @ 23.00
Tankage, 8 and 20 p. c., f. o. b. Chicago.....	18.00 @ 19.00
Tankage, 7 and 20 p. c., f. o. b. Chicago.....	15.00 @ 16.00
Tankage, 6 and 20 p. c., f. o. b. Chicago.....	15.00 @ 16.00
Garbage tankage, f. o. b. New York.....	8.00 @ 9.00
Fish scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate.....	20.00 @ 20.00
Wet, acidulated, 6 p. c. ammonia, per ton.....	14.00 @ 15.00
Asstino, per unit, del. New York.....	2.60 @ 2.65
Sulphate ammonia gas, for shipment, per 100 lbs.....	8.20 @ 8.30
Sulphate ammonia gas, per 100 lbs., spot.....	@ 3.20
Sulphate ammonia bone, per 100 lbs.....	3.10 @ 3.15
So. Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston.....	6.50 @ 7.75
So. Carolina phosphate rock, undried, f. o. b. Ashley River, per 2,400 lbs.....	3.50 @ 3.75
The same, dried.....	3.75 @ 4.00
POTASHES, ACCORDING TO QUANTITY.	
Kalnit, shipment, per 2,400 lbs.....	\$8.95 @ 9.50
Kalnit, ex-store, in bulk.....	9.00 @ 10.05
Kieserit, future shipment.....	7.00 @ 7.25
Muriate potash, 80 p. c., ex-store.....	1.58 @ 1.65
Muriate potash, 80 p. c., future shipment.....	1.80 @ 1.90
Double measure salt (40 @ 40 p. c., less than 2 1/4 p. c. chloride), to arrive, per lb. (basis 48 p. c.).....	1.00 @ 1.12
Sulphate potash, to arrive (basis 90 p. c.).....	2.00 @ 2.30
Sylvinit, 34 to 38 p. c., per unit, S. P.....	.30 @ .40

LIVE STOCK REVIEWS

CHICAGO.

(Special to The National Provisioner from the Bowles Commission Company.)

CATTLE.—Receipts of cattle the first three days of this week, 45,595, being about 4,000 less than the same period last week. Official receipts Monday were 26,469. The supply was larger than expected, but there was fairly good inquiry, and the market was generally steady, except on plain and short fed steers. The quality was not as good as usual, and best cattle sold at \$5.60 for three loads, averaging 1,385@1,553 lbs. Business for the day was on a basis of \$5.40@5.75 for prime steers weighing 1,300 lbs. and upward; \$4.75@5.25 for good to choice, 1,300 lbs. and up, and \$4.25@4.75 for fair to good cattle of the same weight. 1,050@1,250 lb. steers, good to choice quality, suitable from \$4.90@5.30, and fair from \$4.25@4.90. Common to fair short-fed, \$3.75@4.25. Inferior light killers down to \$2.75. About 350 head of fed Texas steers arrived, and sold principally from \$3.80@4.50, averaging 1,070@1,309 lbs. Native butcher stock was active and steady. Good to prime cows and heifers \$3.25@4.25, fancy heifers up to \$4.50, the bulk of good fat cows and heifers \$3.60@4.20. Cannery and cutters \$1.60@2.60, and the bulk from \$2@2.25. Choice export bulls sold largely from 3.60@4, with medium kinds \$3.10@3.50, Bologna \$2.65@2.90, inferior light bulls down to \$2. Veal calves principally \$5.25@5.50, best \$6.25. Stock cattle and feeders are in light supply and steady to strong. Choice heavy feeders at \$4@4.30, common to fair \$3@3.75. Stock heifers scarce and in good demand at \$2.50@3.25. Milkers and springers at \$3.30@5. Receipts Tuesday 3,126, market active and steady. Estimated receipts today 16,000, market 10@15c. higher. The demand centered principally for handy, light and medium weights. Shippers and exporters had small orders for heavy steers. Country feed lots are getting muddy and country cattle feeders generally figure that it will take an advance of 50c. per cwt. at least to pay to carry their cattle through the mud. For this reason fairly liberal movements of cattle may be expected.

HOGS.—Receipts of hogs the first three days this week 69,450, being about 14,000 less than the same period last week. Prices have shown a daily fluctuation of 5@10c., and valued today were about 10c. lower than a week ago. Estimated receipts today were 23,000. Market 5@10c. higher, and the principal feature of the trade being a strong demand for light and medium weights. Eastern shippers were in the market with strong orders for this class of hogs, and desirable heavy weights were rather neglected, but the proportion of light and medium was much heavier than the stronger weights, which had a tendency to even things up. Trading was brisk from the opening, and the entire supply was well cleared at an early hour.

SHEEP.—Receipts of sheep the first three days of this week 54,829, being about 2,000 less than the same period last week. There has been a better inquiry all along the line, and prices have shown a nice advance. Sheep are now selling higher than any time this year, some wethers today bringing \$5.15, while heavy yearlings and wethers mixed sold at

\$5.10. Choice to prime ewes at \$4.65@5. A good kind around \$4.50. Most anything will bring \$3.50 or better. The lamb market was active today, with prices on the good grades about 10c. higher, best selling about steady with top at \$5.90, good to choice at \$5.50@5.75, and fair light grades \$5@5.25. Choice light yearlings find ready outlet at around \$5.25. Clipped stock has been running more freely and everything in this line has met with ready sale. Best lambs of this grade selling at \$4.90@5, choice yearling wethers at \$4.75; wethers at \$4.35@4.60 and ewes at from \$4@4.25, with extra prime up to \$4.50. The outlook for the balance of the week seems quite encouraging.

KANSAS CITY

(Special to The National Provisioner.)

CATTLE.—Receipts this week were 28,000; last week, 35,400; same week last year, 26,500. Moderate receipts have helped prices this week on all kinds of cattle. A fair proportion of good beef steers have been included in the receipts, but there have been few choice ones. Beef steers are 15 to 25c. above a week ago. Top price, 5c. Cows and heifers are 10 to 15c. higher. Best heifers, \$4.40; cows, \$14; stockers and feeders are slightly higher, but country buyers were timid the first days of the week on account of the failure of the beef cattle market to show expected gains. A liberal run of quarantines has arrived and prices on same are 10 to 15c. higher. Bulls are steady. Veals unchanged.

HOGS.—Receipts this week were 27,800; last week, 34,100; same week last year, 36,000. Top hog prices are practically unchanged from a week ago. The feature of the week has been the closing of the spread between light and heavy hog values. Heavy hogs are 5c. lower than a week ago, and light weights are 5c. higher. Packers have been extremely indifferent all the week, and claim there is little outlet for hog products.

SHEEP.—Receipts this week were 17,800; last week, 23,700; same week last year, 22,000. Top hog prices are practically unchanged. Lambs have gained 15 to 25c. Larger proportion of mutton receipts were good to choice quality than for some time. Wethers and ewes sold at the highest prices of the season. Very few yearlings have arrived. The best lambs sell at \$5.75, yearlings \$5.20, wethers \$4.85, ewes \$4.50.

HIDES are unchanged; green salted, 7c.; dry flint butcher over 16 lbs., 15c.; fallen, 13½c.; under 16 lbs., 12½c.; dry glue, 7c.

Packers' purchases this week:

	Cattle.	Hogs.	Sheep.
Armour	5,172	9,291	5,842
Cudahy	2,925	5,726	1,423
Fowler	25	.....	1
Ruddy	756	195	518
Schwartzschild	3,222	5,120	3,766
Swift	3,449	6,804	7,334

CATTLE SLAUGHTERED.

Special reports to The National Provisioner show the number of cattle slaughtered at the following centers for the week ending March 19:

Chicago	31,342
Omaha	16,234
Kansas City	18,451
St. Joseph	11,214
Cudahy	296
Sioux City	1,022
Cincinnati	3,050
Louisville	1,100
New Jersey and Jersey City	7,163
Detroit	725

HOGS SLAUGHTERED.

Special reports to The National Provisioner show the number of hogs slaughtered at the following centers for the week ending March 19:

Chicago	86,409
Omaha	45,858
Kansas City	32,449
St. Joseph	26,318
Cudahy	4,748
Sioux City	9,990
Ottumwa	10,904
Cleveland	7,500
Cedar Rapids	5,880
Nebraska City	4,456
Bloomington	1,244
Cincinnati	10,420
Indianapolis	14,654
Louisville	4,500
New York and Jersey City	34,121
Detroit	2,704

SHEEP SLAUGHTERED.

Special reports to The National Provisioner show the number of sheep slaughtered at the following centers for the week ending March 19:

Chicago	59,591
Omaha	23,928
Kansas City	19,592
St. Joseph	26,651
Cudahy	241
Sioux City	35
Cincinnati	1,214
New York and Jersey City	18,965
Detroit	1,039

RECEIPTS AT CENTRES.

Receipts for the week ending March 19 at six markets, with comparisons:

	CATTLE.			
	Last week.	Prev. week.	1903.	1902.
Chicago	58,000	57,500	55,900	53,400
Kansas City	34,000	28,400	30,700	22,000
Omaha	24,200	16,500	18,600	13,800
St. Louis	13,200	17,100	11,000	11,900
St. Joseph	10,000	9,100	9,300	4,900
Sioux City	6,500	4,500	7,000	6,900
Totals	147,700	133,100	132,500	112,400

HOGS.			
Chicago	145,100	122,800	123,500
Kansas City	24,000	29,000	35,400
Omaha	45,400	35,700	27,500
St. Louis	30,500	31,800	29,400
St. Joseph	26,400	25,100	30,500
Sioux City	16,500	16,800	8,400
Totals	298,500	261,200	254,700

SHEEP.			
Chicago	86,000	79,900	66,500
Kansas City	22,200	23,100	22,900
Omaha	32,100	31,800	33,700
St. Louis	9,200	9,800	9,700
St. Joseph	25,000	21,100	16,300
Sioux City .....	.....	400	300
Totals	175,100	166,100	149,400

Receipts of hogs at eleven leading Western and Eastern markets follow:

	M'ch 19.	Wk. ago.	Year ago.	1902.
Chicago	8,000	13,000	6,000	18,300
Kansas City	1,500	2,000	2,000	1,000
Omaha	7,000	4,000	3,000	6,800
St. Louis	1,000	3,000	1,500	1,500
St. Joseph	2,800	1,700	2,700	3,900
Sioux City	2,500	3,000	1,500	3,000
St. Paul	2,400	2,000	1,000	1,000
Indianapolis	1,500	800	2,500	3,000
Cleveland	3,000	2,200	1,000	500
Buffalo	2,000	3,000	3,000	3,000
Pittsburg	1,500	1,000	1,000	1,000
Totals	33,200	36,000	26,500	41,100
Week's totals	376,000	329,000	328,000	411,000
Year so far	5,833,000	.....	4,865,000	5,917,000

SATURDAY, MARCH 19.

	Cattle.	Hogs.	Sheep.
Chicago	400	10,000	3,000
Kansas City	100	2,000	.....
Omaha	300	6,300	.....
St. Louis .....	.....	.....	.....

MONDAY, MARCH 21.

Chicago	58,000	37,000	25,000
Kansas City	5,000	4,000	3,000
Omaha	3,500	4,200	9,000
St. Louis .....	.....	.....	.....

TUESDAY, MARCH 22.

Chicago	2,000	12,000	15,000
Kansas City	9,000	9,000	5,000
Omaha	7,400	7,000	11,700
St. Louis			

WEDNESDAY, MARCH 23.

Chicago	16,000	23,000	18,000
Kansas City	8,000	7,000	3,000
Omaha	5,800	8,500	12,000
St. Louis			

THURSDAY, MARCH 24.

Chicago	7,500	17,000	13,000
Kansas City	3,000	6,000	3,000
Omaha	4,000	5,700	10,000
St. Louis			

NEW YORK LIVE STOCK.

WEEKLY RECEIPTS TO MARCH 21, 1904.

	Bees.	Cows.	Calves.	Sheep.	Hogs.
Jersey City	1,889	—	1,452	11,701	14,245
Sixtieth street	330	50	4,226	7,333	10
Fortieth street	—	—	—	—	10,477
Lehigh Valley	6,360	—	—	—	3,389
Weehawken	1,329	—	—	2,172	—
Scattering	1,013	63	62	41	—
Totals	9,602	118	5,740	21,247	34,121
Totals last week	10,299	128	3,440	16,035	30,498

WEEKLY EXPORTS TO MARCH 21, 1904.

	Live cattle.	Live sheep.	Qrs. of beef.
Schwartzschild & S., Sa. Bovie	445	—	—
Schwartzschild & S., Sa. Minneapolis	400	—	2,000
Schwartzschild & S., Sa. St. Paul	—	—	1,500
Schwartzschild & S., Sa. Br. Empire	320	—	—
J. Shamburg & S., Sa. Bovie	450	1,510	—
J. Shamburg & S., Sa. Minneapolis	400	—	—
J. Shamburg & S., Sa. Br. Empire	320	682	—
Swift Beef Co., Sa. Celtic	—	—	1,200
Swift Beef Co., Sa. Corinthian	200	—	—
Morris Beef Co.	—	—	2,700
Morris Beef Co., Sa. Celtic	—	—	2,200
Morris Beef Co., Sa. Corinthian	150	—	—
Armour & Co., Sa. Bovie	—	—	1,700
Armour & Co., Sa. St. Paul	—	—	1,800
Cudahy Packing Co., Sa. Etruria	—	—	1,800
Miscellaneous, Sa. Trinidad	14	50	—
L. S. Dillenback, Sa. Fontabelle	—	60	—
Total exports	2,080	2,282	15,000
Total exports for last week	3,084	2,473	15,450
Boston exports this week	3,448	4,050	10,900
Baltimore exports this week	1,134	1,350	954
Philadelphia exports last week	1,711	250	1,200
Portland exports last week	897	1,165	—
Newport News exports last week	612	579	—
St. John exports this week	2,181	2,590	—
To London	3,373	3,510	5,000
To Liverpool	6,500	7,083	20,658
To Glasgow	1,124	570	—
To Bristol	300	894	—
To Manchester	1,131	—	—
To Antwerp	220	—	—
To Southampton	—	—	8,300
To Bermuda and West Indies	14	110	—
Total to all ports	12,682	12,176	28,958
Totals to all ports last week	10,039	10,456	28,068

ICE MAKING IN THE HOLY LAND.

A small ice plant has been in operation in Jerusalem for the past three years, and the demand, though at present limited, is steadily increasing. At Jaffa the ice business was established about 1890 on a small scale, and for several years the business was not successful; but in 1899 the demand for ice increased, the works were enlarged, and since then have been operated quite successfully. Oil is used for fuel in an engine of German manufacture. The daily demand is about 1,500 pounds, and the price charged the same as at Jerusalem—five cents per kilogram. The water in Jaffa comes from wells, and, owing to proximity to the sea, is brackish. The ice is never clear, and when melted leaves a sediment. The water used in Jerusalem is rain water, and the ice like crystal. No natural ice is brought to this country. The demand for ice was first made by the hospitals; the hotels soon after began its use, and now nearly all foreign residents and many of the wealthy native families are consumers.

WANTED AND FOR SALE.

Reference to page 48 may discover something of interest to you, whether you are employer or employee. Look it up.

GENERAL MARKETS.

LARD IN NEW YORK.

Western steam, \$7.25; city, steam, \$6.50; refined, continent, tcs., \$7.40; do., South America, tcs., \$8.00; do., kegs, ???; compound, \$6.75.

HOG MARKETS, MARCH 25.

CHICAGO—Receipts, 18,000; steady; \$5.00@5.55.

KANSAS CITY—Receipts, 4,000; steady; \$4.95@5.22½.

OMAHA—Receipts, 5,500; slow; steady to easy; \$4.85@5.10.

INDIANAPOLIS—Receipts, 3,000; steady; \$5.25@5.65.

CLEVELAND—Receipts, 20 cars; fairly active; \$5.65@5.75.

EAST BUFFALO—Receipts, 10 cars; 5 @10c. lower; \$5.60@5.80.

LIVERPOOL.

Liverpool, March 25.—(By cable.)—Beef, extra India mess, 67s. 6d.; pork, prime mess, western, 67s. 6d.; shoulders, 31s. 6d.; hams, s. c., 46s.; bacon, c. c., 35s.; do., short ribs, 37s. 6d.; do., long clear, light, 37s.; do., heavy, 36s. 6d.; backs, 36s.; bellies, 41s.; tallow, 25s. 3d.; turpentine, 43s. 3d.; rosin, common, 7s. 6d.; lard, prime western, tcs., 35s. 3d.; do., American refined, 28-lb. pails, 35s. 6d.; cheese, white, 49s.; do., colored, 51s.; American steam lard (Hamburg), 50 kilos, 35¼; tallow, Australian (London), 27s. 9d.; cottonseed oil, refined (Hull), 19s. 7½d.; linseed oil (London), 16s. 1½d.; petroleum refined (London), 7 1-16d.

OLEO AND NEUTRAL LARD.

The oleo market is steady, although business this week has been light. At this time of the year there is a good deal of oil in Europe which is discolored, and which has to be sold quickly, and this depresses the value of good oils. The demand for the lower grades of oleo oil is very quiet.

Neutral lard is now, for the first time in a long while, below the price of choice oleo oil.

Business this week in oleo, neutral and cotton oil extremely slow.

FRIDAY'S CLOSINGS.

Provisions.

The signs of a steadier tendency, as shown in our weekly review upon another page of this issue, were emphasized this morning in better prices for pork by 17c. per barrel and for lard and ribs of 2-5 points; but there were frequent fluctuations in the prices. Hog receipts at Chicago were only 18,000. The grain markets were all early in the day substantially higher.

Tallow.

Market not varied from the features in our review in another column of this issue. City, hhds., offered at 4½c. Weekly contract invoices made at 4½c.

Oleo-Stearine.

More difficult to buy at 6¼c.

Cottonseed Oil.

Hardly new features from those in our weekly review in another column. The traders are now beginning to talk as possible 34c. oil

for the near deliveries, as well as the 35c. price for May, mentioned in the review (prime yellow in New York market), unless the lard market soon shows substantially advanced prices. This is only noted as the gossip of the market, as the developments of other fat markets could upset all of these prognostications of the extreme weakness. It looks to us as if cotton oil would see better prices after the May delivery is out of consideration, whatever happens meanwhile. Nevertheless, there have been additional sales of 1,000 bbls. prime yellow, April (New York), at 35¼c., and 200 bbls. do., May, at 35¼c. A small lot (2 tanks) of crude sold in the Southeast at 28¼c.

Other sales: 500 bbls. May, 35¼c., now 35¼c., bid; 500 bbls. S. O. to Sept. at 35c.; 200 bbls. July, sold at 36¼c.; March, 34¼@35¼c.; white sold 38; winter yellow, 38c.

PROMOTING BUSINESS.

It is a trite saying that if any business is worth doing it is worth doing well. In this generation of progress, when the attainment of complete success means nothing short of an alert and untiring zeal, there is no place for the drone, except at the rear. No merchant or manufacturer, says the Shoe & Leather Reporter, can sit supinely down and wait for business to come to him, even were such manufacturer or merchant to hold a monopoly of any article which everybody wanted. If it is a truism that one half the world does not know how the other half lives, so it is as applicable that a merchant in California has no knowledge of what another in Massachusetts is doing. Even a fugitive from justice would be entirely immune from arrest or molestation when he had departed from the scene of his wrongdoing were it not through the publicity given that would put the detectors of crime on the alert.

No merchant who is possessed of any ambition is satisfied with small things, but he is constantly reaching out into the beyond to acquire more business, and such merchants use all the machinery at their command to ensure such results, and, in a majority of cases, they meet with success. It was only a short time ago that a leading manufacturer of men's three dollar shoes, whose name was almost a household word in every section of the country through the publicity given, received a letter from the Far West with no superscription whatever on the envelope, but the sender had cut the picture of the manufacturer from a paper and pasted it on the envelope, and it reached its destination.

This manufacturer did not believe in indiscriminately throwing away his money, but he appreciated the fact that it was publicity that would eventually make him the largest producer of men's shoes in the country. He thoroughly believed that if his business was worth the doing at all, it was worth doing well. A salesman representing a large shoe manufacturing house called on a merchant to solicit orders. He placed his card on the desk of the merchant, who picked it up and said: "Who is this manufacturer? I never heard of him." It is needless to say that such a remark put a damper on the salesman who had to meet at every turn the men who represented houses which had acquired a reputation through publicity.

RETAIL SECTION

SHOW CASE REFRIGERATORS.

All marketmen find the greatest difficulty in making a satisfactory display of fresh meats from May to November, and a great deal of thought has been expended by progressive marketmen on the subject. During the winter months their side walls are usually filled with all kinds of fresh meats, which can be displayed there with perfect safety until they are sold. During the warmer months of the year, however, it is practically impossible for any marketman to keep anything on display on his counters or meat racks for even a few hours at a time without great danger of discoloration. This, of course, means that the discolored meat must be trimmed off before it is disposed of, and that in turn always results in considerable waste and loss to every meat cutter.

A way, however, has been devised to overcome this objection and to make even a better display at all seasons of the year, with absolutely no risk whatever, through the medium of something new in the way of show case refrigerators, manufactured by Wolf, Sayer & Heller, of 37 Pearl Street, New York City, and Fulton and Peoria Streets, in Chicago. This is nothing less than a plate-glass front refrigerator attached to the side wall of any meat market, and so constructed that the same show can be made behind plate glass on the hottest day of July as the coldest weather during the winter months with absolute safety to the meats.

The illustration herewith represents such a refrigerator, furnished to Mr. Charles Weisbecker of this city, in the Manhattan Market, at No. 268 West One Hundred and Twenty-fifth street. The refrigerator measures 90 feet long and 9 feet 6 inches high, but occupies only 3 feet of floor space against the side wall. This is practically a complete refrigerator, the walls all being built approximately 6 inches thick, with two dead-air spaces, each dead-air space being lined with three thicknesses of rosin-sized, moisture-proof paper, manufactured especially for this purpose, making twelve thicknesses of paper in each wall.

The front of the case has 27 sash, each being fitted with two thicknesses of best French polished plate-glass, measuring 66 inches high by 36 inches wide. These sash are made to raise and slide through the top of the case. The actual weight of each sash is 126 pounds, but by means of counter-weights they are adjusted so finely that any window can be raised or lowered with the little finger.

The total amount of wood exposed between each window is only four inches, making practically one continuous sheet of plate-glass from end to end of the refrigerator. All show case refrigerators made in the past have been fitted with swinging doors on the front, with from 12 to 15 inches of wood shown between each door. To this objectionable feature must be added one which is even more serious, and that is, that windows swinging into the space between the case and the counters or blocks are always in the way of the men working in front. This objection is entirely eliminated in the type of refrigerators furnished Mr. Weisbecker.

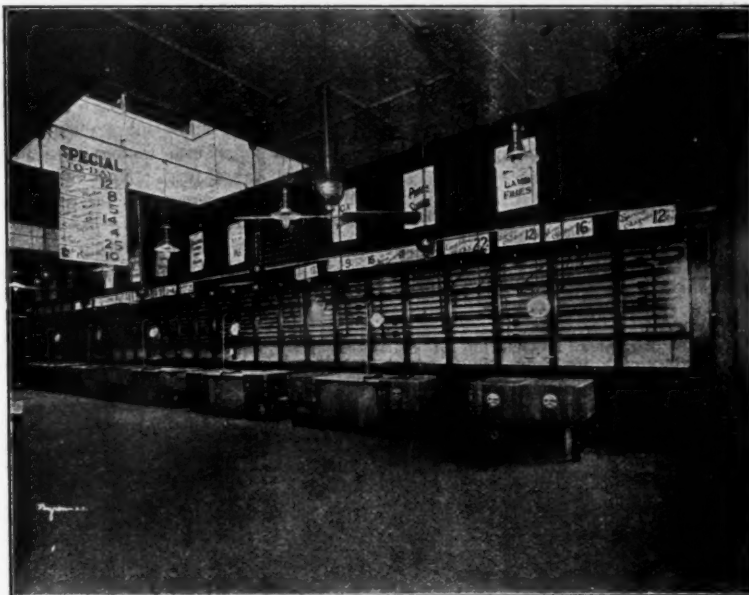
The case in question is refrigerated from a twenty-five-ton machine in his basement by means of coils attached to the rear wall of the refrigerator. In front of these coils are suspended meat rails, the actual hanging capacity of the case being over 900 pieces of meat. The advantage of being able to hang and show so much meat will be fully appreciated by the average marketman, more particularly during

extremely warm weather, and it is a refreshing sight to see such a display, with pipes thickly covered with ice in conjunction.

Before Mr. Weisbecker ordered this case, he, like all marketmen, was obliged to hang up whatever meat he desired to show on the same side wall of the store in the morning and take it down again at night, placing it in his large refrigerator in the basement. Now he

case has been more than realized three times over since it was put up.

Another interesting feature in connection with this particular case is the dispatch with which it was installed. It was erected during the hottest weather, in July, 1902, in the incredibly short time of about twenty-two hours. This was done from Saturday night at 11.30, when Mr. Weisbecker closed the market for



MODEL RETAIL MARKETS—CHARLES WEISBECKER, NEW YORK CITY.

merely fills the case and replenishes it from time to time, according to sales. Since installing this case, Mr. Weisbecker has not been obliged to lose a pound of meat, and this, added to the expense he was formerly put to in loading and unloading the old style rails, means an actual saving to him, according to his own statement, of about \$70 per week. In addition to this, he has increased his business so much that he states freely the cost of the

the day, under the charge of Wolf, Sayer & Heller's superintendent, who, with his men, worked steadily all Saturday night and Sunday, until 9:30 P. M., when it was ready for the ice machine men and plumbers. Dealers in meat, and particularly those who have refrigerating machinery, should call at Mr. Weisbecker's when next in the city and examine the case themselves. It will prove a revelation to them.

LOCAL AND PERSONAL.

George Burt will open a new market at Russell, N. Y.

Niles H. Johnson will open a new market at Carbondale, Pa.

Albert Reinhart will open a shop on Eleventh street, Portsmouth, O.

J. E. Emmons has bought the market of Palmer Freshley at Homeworth, O.

The Wylan Mercantile Co. has bought H. N. Brannon's market at Wylan, Ala.

A. J. Bright has closed his market at Findlay, O., and will retire from business.

The market of E. D. Ball at Nashville, Tenn., was damaged by fire last week.

J. R. Entrekin has purchased the market of Weaver & Dashner at Coatesville, Pa.

P. A. Doud has bought the market of Henry Rust, No. 1,312 Washington avenue, Cairo, Ill.

Thos. S. McCann has purchased an interest in the market of B. C. Wiseman at Salem, O.

Matthews & Cory opened their new West Side market on Park avenue, Helena, Mont., last week.

Schromofsky & Mogg have bought the market of Joseph Rappel, No. 303 East Federal street, Youngstown, O.

M. J. Fay has bought the W. H. Lockwood market at Saratoga Springs, N. Y., and will take possession April 1.

Schoenberger Bros. have opened their handsomely remodeled market at No. 90 George street, New Haven, Conn.

Henry Weaver, wholesale and retail dealer in smoked meats, has opened a store at No. 419 N. Ninth street, Reading, Pa.

Charles Burkle has bought the meat market of Frederick Conzelmann at No. 293 North College avenue, Grand Rapids, Mich.

Samuel Weisberger has bought the market at Avoca, Pa., which has been conducted by Mrs. James Brown for nearly thirty years.

The Retail Meat Dealers' Protective Association of Cincinnati, O., has elected these officers: Fred. C. Schneider, president; H. Bolte, vice-president; J. Wendel, treasurer, and J. F. Stout, secretary.

Frank Huppert, a butcher at Memphis, Tenn., has been fined for selling uninspected meat. He had previously evaded the city inspector and refused to give him an opportunity to inspect his meat at the abattoir.

Employees of the railroad shops at Parsons, Kan., to the number of 250 have started a co-operative grocery and meat store by means of which they expect to supply themselves with goods at less than current market prices.

Albert Spangenberg, a pioneer meat dealer of St. Paul, Minn., died at his home last week. He had been a resident of the city for over forty years, and in the meat business for thirty. He is survived by a wife and five children.

The retail butchers of Pittsburg, Pa., have this year adopted the plan of uniting in letting their ice contracts. Heretofore they have made individual contracts; this year they let a single contract to one company for all their ice.

The Master Butchers' Association of St. Louis is maintaining its fight for Sunday closing with vigor. Two dealers who refused to close were arrested last week for violation of the closing ordinance, and the association will prosecute them.

The city council of Wichita, Kan., has passed an ordinance closing all meat markets on Sunday, with a fine of \$50 and 30 days' imprisonment for violation. The ordinance was passed as the result of a petition from every dealer but one in Wichita.

The retail dealers of Memphis, Tenn., have organized a Retail Grocers' and Butchers' Association, with a membership of over 200, and the following officers: President, Pat Boyle; vice-president, F. K. Sherron; secretary, M. G. South; treasurer, Frank McLaughlin, Sr.

The Butchers' Protective Association of Detroit, Mich., is making a strong appeal to the public to stop the nuisance and injustice of Sunday meat and grocery shops. The fact is pointed out that most butchers are obliged to work 16 hours a day, 18 hours on Saturday and a large part of Sunday. The association will try to have a bill passed compelling all meat shops to close on Sunday. The association claims that it has already persuaded 95 per cent of the shops to close.

HE PAID ALL THE BILLS.

George S. Vail of Florida, Orange county, N. Y., the grocer who by mistake sold a package of hellebore to the village butcher for white pepper, which the latter put in his sausage for seasoning, thereby poisoning half the residents of the village, has effected a satisfactory settlement with the butcher and the victims and is again able to sleep at night. Vail paid the butcher for his sausage and personally called on the families where sickness resulted, and after asking forgiveness paid all doctors' bills. But the people of Florida have lost their appetite for sausage.

TO TAKE STAINS FROM MARBLE.

To take stains from white marbles, mix turpentine $2\frac{1}{4}$ tablespoonfuls; lye, $1\frac{1}{2}$ gills; oxgall, $1\frac{1}{2}$ oz.; pipe clay enough to make a paste. Apply the paste to the stain and let it remain for several days. Iron mould or ink spots may be taken out by dissolving in $1\frac{1}{2}$ pint rainwater, $1\frac{1}{2}$ oz. oxalic acid, $\frac{1}{4}$ oz. butter antimony, flour sufficient to make a paste. Put on with a brush, let it remain a few days, wash off. Grease spots may be removed by applying common salt saturated with benzine.

To remove iron stains in marble, boil the marble in a strong solution of caustic soda, then take out and rub well. Soon all the stains will come out.

TO REPAIR MIRRORS.

Remove the silvering from the glass around the scratch so that the clear space will be about a quarter of an inch wide. Thoroughly clean the clear space with a clean cloth and alcohol. Near the edge of a broken piece of looking glass mark out a piece of silvering a little larger than the clear space on the mirror to be repaired. Now place a very minute drop of mercury on the center of the patch and allow it to remain for a few minutes, clear away the silvering around the patch, and slide the latter from the glass. Place it over the clear spot on the mirror, and gently press it down with a tuft of cotton. This is a difficult operation, and we would advise a little practice before trying it on a large mirror.

LENORMAND'S FRENCH MUSTARD.

The following is Lenormand's recipe for French mustard: Flour of mustard, 2 lbs.; fresh parsley, chervil, celery and tarragon, of each, $\frac{1}{2}$ oz.; garlic, one clove; 12 salt anchovies (all well chopped); grind well together, add salt one ounce; grape juice or sugar to sweeten, and sufficient water to form the mass into a thin paste by trituration in a mortar. When put into pots a red-hot iron is momentarily thrust into the contents of each, and a little wine vinegar added.

TO COLOR HORNS.

To color the brown streaks black on buffalo and steer horns, after they have been polished, apply a dilute solution of nitrate of silver with a brush or rag several times until the desired intensity is obtained. Allow it after each application to dry in the sun perfectly before applying the next coat. Polish when sufficiently black.

A VEGETARIAN PLEA.

"Americans as a class are meat eaters, and they forget the number of foods that have meat value and are perhaps more palatable," says the *Ladies' Home Journal*.

"Nuts, which might be called the hard fruits, are attractive, tasty and when judiciously mixed with cereals and the softer fruits supply all nature's requirements. They are wholesome and less liable to contamination than the flesh of animals. Nuts disagree with many people because they are eaten as a desert after a hearty meal. They must be taken as meat and not with meat. Then, too, they are difficult of mastication, and few Americans have sufficient time for mastication. As nuts are principally digested in the stomach, the breaking apart, the mastication, may be done by a chopper or grinder.

"Peanuts are plentiful and cheap. The grinding of roasted peanuts seems to alter their flavor; peanut butter, for instance, is not as palatable as plain peanuts. These nuts are very rich in nitrogen and contain considerable starch and oil. When boiled and mashed they are much better than when roasted and ground. Made into soups, or mixed with well cooked hominy or bread-crumbs and baked, they give attractive and healthful 'meat' dishes.

"Almonds are really digesters or appetizers; they are too expensive to be used alone in large quantities; four or five thoroughly masticated at the end of a meal will frequently aid in the digestion of other foods. For this reason we serve toasted salted almonds at dinner. Brazil or cream nuts are very rich in fat, and should be blended with pecans, English walnuts or hazel-nuts. Chestnuts are starchy and take the place of potatoes.

"Coconuts contain very little nitrogen but are rich in oil; the fibre is difficult of digestion. The cream and milk are excellent for salads and sauces. Black and white walnuts, as well as hickory nuts, contain nitrogen and oil but no starch. Blend with rice or potatoes. By the careful selection and proper blending of nuts with other vegetable foods a well balanced ration may be easily and cheaply obtained."

A BURNING ICEHOUSE.

A curious sight was witnessed at Goodland, Kan., the other day. A Rock Island icehouse, containing 750 tons of ice, caught fire and entirely burned away, leaving the huge pile of ice standing stark and grim against the scenery. It is said that the ice pile melted only around the edges.

EUROPEAN HOTEL.....

.....250 ROOMS, \$1.00 AND UP

Kaiserhof
Absolutely Fire-proof

ROESSLER & TEICH, Managers

270 South Clark Street, near Jackson Boulevard, Chicago
Half block from New Lake Shore Depot, Post-office and Board of Trade

UNIQUE GERMAN RESTAURANT

Just finished at a cost of \$50,000

